

VIRGINIA DEPARTMENT OF MINES, MINERALS AND ENERGY
VIRGINIA DIVISION OF MINERAL RESOURCES

CATALOG OF PUBLICATIONS AND MAPS



DIVISION OF MINERAL RESOURCES
CHARLOTTESVILLE, VIRGINIA
2007

DEPARTMENT OF MINES, MINERALS AND ENERGY

RICHMOND, VIRGINIA

George P. Willis, Director

DIVISION OF MINERAL RESOURCES

CHARLOTTESVILLE, VIRGINIA

Dr. Edward E. Erb, State Geologist and Division Director

SALES

434-951-6341

434-951-6365 (FAX)

E-mail: DmrSales@dmme.virginia.gov

DMME WEB STORE

<https://www.dmme.virginia.gov/commerce/>

GEOLOGIC INFORMATION

434-951-6342

E-mail: DmrInfo@dmme.virginia.gov

A listing of publications and maps may be accessed on the Web at <http://www.dmme.virginia.gov>

STAFF

ADMINISTRATION

Edward E. Erb, *State Geologist and Division Director*, 434-951-6350

Felicia M. Ward, *Administrative Assistant*, 434-951-6348

ECONOMIC GEOLOGY

William L. Lassetter, *Economic Geology Manager*, 434-951-6361

Cathy B. Enomoto, *Geologist Specialist*, 434-951-6362

David A. Hubbard, Jr., *Geologist Specialist*, 434-951-6353

James A. Lovett, *Geologist Specialist*, 276-676-5830

David L. Swales, *Geologist Specialist*, 434-951-6344

Gary F. Wilder, *Geologist Specialist*, 276-676-5831

GEOLOGICAL MAPPING

Matthew J. Heller, *Geologic Mapping Manager*, 434-951-6351

C. Rick Berquist, *Geologist Specialist*, 757-221-2448

Mark W. Carter, *Geologist Specialist*, 434-951-6357

Alfred R. Taylor, *Geologist Specialist*, 276-676-5577

William W. Whitlock, *Geologist Specialist*, 276-676-5829

Gerald P. Wilkes, *Geologist Specialist*, 434-951-6364

Scott T. Williams, *Geologist Specialist*, 434-951-6360

GEOLOGIC INFORMATION & SUPPORT SERVICES

Michael L. Upchurch, *Geologic Information Manager*, 434-951-6363

Elizabeth V. M. Campbell, *Geologic Information Coordinator*, 434-951-6343

Amy K. Gilmer, *Geologist Specialist*, 434-951-6368

Delores J. Green, *Geology Sales Representative*, 434-951-6341

Edwin W. Marshall, *Administrative Specialist*, 434-951-6355

FRONT COVER: Southwestern terminus of Hogback Mountain known as Big Butt in Rockbridge County north of Interstate Highway 64. The ridge is underlain by Silurian sandstones. (Photograph by G. P. Wilkes)

Last modified: 28 August 2007, mlu

Contents

General information.....	i
Earthquake information.....	i
Order fulfillment, return and refund policy.....	i
Ordering.....	i
Purchase orders.....	i
Payment options.....	ii
Shipping charges.....	ii
Returns.....	iii
Refunds.....	iii
Publications.....	1
Bulletins.....	6
Mineral Resources Reports.....	9
Reports of Investigations.....	10
Information Circulars.....	11
Mineral Resources Circulars.....	11
State maps.....	12
Brochures.....	12
Miscellaneous maps.....	12
Reprints.....	12
Virginia Minerals.....	12
Mineral Industry of Virginia.....	12
Open-file reports.....	12
Books.....	13
Educational CD-ROMs.....	13
Rock and mineral set.....	14
U.S. Geological Survey Reports and Maps.....	14
Geophysical Maps (gravity, aeromagnetic, and aeroradiometric).....	14
Topographic maps and products.....	16
Base maps.....	16
International Series.....	16
Shenandoah National Park.....	16
1:250,000-scale topographic maps.....	17
1:100,000-scale topographic maps.....	17
Topographic bathymetric maps.....	18
County topographic maps.....	18
7.5-minute quadrangles.....	18
Orthophotoquads.....	18
Aerial photographs.....	18
Atlas.....	18
Raised relief maps.....	18
3-D topographic maps.....	18
Digital topographic data.....	19
Geologic mapping.....	20
Index to geologic quadrangle mapping (1:24,000-1:62,500 scale) in Southwestern Virginia.....	20
Index to geologic quadrangle mapping (1:24,000-1:62,500 scale) in Western Virginia.....	22
Index to geologic quadrangle mapping (1:24,000-1:62,500 scale) in Northern Virginia.....	24
Index to geologic quadrangle mapping (1:24,000-1:62,500 scale) in Southern Virginia.....	26
Index to geologic quadrangle mapping (1:24,000-1:62,500 scale) in Eastern Virginia.....	28
Listing of quadrangle geologic maps in Virginia.....	30
Index to county-based geologic mapping in Virginia.....	31
Index to geologic quadrangle mapping (1:100,000 Scale) in Virginia.....	32
Index to regional geologic mapping in Virginia.....	33
General index.....	35
Index to Virginia Minerals articles.....	47

VIRGINIA DEPARTMENT OF MINES, MINERALS AND ENERGY

DIVISION OF MINERAL RESOURCES

GENERAL INFORMATION

The Division of Mineral Resources provides geologic, energy, and mineral resource information to a wide variety of industrial, governmental, academic, and residential customers. Division personnel are engaged in basic and applied research projects in the major regions of the State, from the Coastal Plain, across the Piedmont, Blue Ridge, and Valley and Ridge to the Appalachian Plateaus in southwestern Virginia. These projects range from broad, regional mapping and stratigraphic compilations to detailed site-specific studies.

The geologic, mineral resource, and geophysical data generated by the Division are used for long-term resource planning, land-use planning, exploration and development of energy and mineral resources, and baseline earth-science data for potential natural and man-made hazards. In addition, the Division administers and monitors the State topographic map program.

EARTHQUAKE INFORMATION

In cooperation with the Virginia Tech Seismological Observatory, a new station was installed adjacent to our building. Earthquake information for Charlottesville and other nearby locations is available from their web site: <http://vtso.geol.vt.edu/outreach/vtso/heli/GIF/>. Additional information may be obtained from the USGS National Earthquake Information Center in Colorado: telephone (303) 273-8500.

ORDER FULFILLMENT, RETURN AND REFUND POLICY

Effective Date: September 28, 2004

Last Update: December 1, 2006

Ordering

Orders may be placed by mail, fax, telephone, DMME On-Line Store and the Sales Office. The Sales Office hours are 8:00 a.m. – 4:30 p.m. Monday through Friday, excluding state holidays. The phone number for the Sales Office is (434) 951-6341 and the FAX number is (434) 951-6365. The Sales Office is located at:

900 Natural Resources Drive, Suite 500
Charlottesville, VA 22903

The link to the DMME On-Line Store may be found by visiting the following URL <http://www.dmme.virginia.gov> and selecting the DMME Web Store link.

Orders placed by telephone, fax or mail:

We currently do not have backorders. If we are unable to fill the order due to depletion of stock, you will be contacted and refunded for the item(s) which are out of stock and any applicable sales tax and shipping charges.

Orders placed at DMME On-Line Store:

We currently do not have backorders. If we are unable to fill the order due to depletion of stock, you will be contacted. Your original order will be canceled and you will be refunded for the entire amount.

Purchase Orders

Purchase orders may be faxed or mailed and must be on company letterhead and include a purchase order number, the Federal Identification Number (EIN), a contact person with telephone number, invoice address and ship address if different from invoice address.

Payment Options

All orders must be pre-paid.

DMR accepts cash, money order, MasterCard, Visa, personal or business checks made payable to the Treasurer of Virginia. DMME On-line Store accepts only MasterCard and Visa.

Virginia sales tax is currently 5%. Sales tax is applied to all purchases at the Sales Office and to orders shipped to a Virginia mailing address.

Tax-exempt organizations must have a W-9 form on file with DMME before their order is processed. Completed W-9 forms may be faxed to (434) 951-6365 or mailed to:

DMME, Division of Mineral Resources
900 Natural Resources Drive, Suite 500
Charlottesville, VA 22903

If a W-9 form is needed, please contact the Sales Office at (434) 951-6341 to obtain a form.

Shipping Charges

Shipping charges are applied to the following items which we resell from other distributors. These items will have two red asterisks in the catalog.

Raised relief maps
USGS products - topographic maps, orthophoto quadrangles, geologic publications
Virginia Gazetteer
Roadside Geology of Virginia
Guidebook to the Natural Bridge and Natural Bridge Caverns
Natural Tunnels, Nature's Marvel in Stone
Groundwater Resources of Rockbridge County, Virginia
Reprints of journal articles
Rock sets

Current shipping charges are:

Total Cost of Items which have Shipping Charges	Postage Charge
Less than \$1.50	\$1.50
\$1.51 to \$10.00	\$4.00
\$10.01 to \$20.00	\$5.00
\$20.01 to \$50.00	\$6.00
More than \$50.00	\$7.00

Orders which include topographic maps or orthophoto quadrangles will ship the same day unless the order is received after 2:00 pm Eastern Time.

Shipping is UPS Ground or United States Postal Service. For expedited shipping (next day or overnight), the customer's UPS or FedEx account number is required.

Shipping Outside the United States

For orders shipping outside the United States and its territories, please contact the Sales Office at (434) 951-6341 for the shipping costs.

Returns

Orders placed at the Sales Office:

DMR will accept merchandise for return if it is in good or “resellable” condition within 30 days of sale for over the counter orders. Sales receipt must accompany the item(s).

Return shipping costs will be paid by the individual or organization returning the item.

Orders placed by telephone, fax or at DMME’s On-line Store:

DMME will accept merchandise for return if it is in good or “resellable” condition within 30 days of the shipping date for the order. Sales receipt must accompany the item(s) for orders placed by telephone or FAX. A copy of the DMME On-Line receipt or the order id and transaction id must accompany the item(s) for orders placed via DMME’s On-line Store.

Return shipping costs will be paid by the individual or organization returning the item.

Refunds

Refunds will be issued for the following:

- 1) Overpayment for items purchased/received if paying by check or money order
- 2) Return of items in good condition
- 3) Item(s) out of stock

For orders paid by cash or money order:

For same day returns, the cash amount will be refunded including applicable tax. All other returns will require a revenue refund check. To process a refund, a Social Security number (SSN) or Federal Identification Number (EIN) is required. DMME will contact customers by mail to obtain the required information. Please do not e-mail this information to us.

For orders paid by check:

All orders paid by check will require a revenue refund check. To process a refund, a Social Security number (SSN) or Federal Identification Number (EIN) is required. DMME will contact customers by mail to obtain the required information. Please do not e-mail this information to us.

For orders paid by MasterCard or Visa:

All orders paid by MasterCard or Visa will have a credit refunded to the credit card used for the purchase. For orders placed at DMME’s On-line Store, we will notify you via e-mail when the credit has been applied to your account.

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

PUBLICATIONS

This series replaces the BULLETIN, MINERAL RESOURCES REPORT, REPORT OF INVESTIGATIONS, MINERAL RESOURCES CIRCULAR, and INFORMATION CIRCULAR series, all of which have been discontinued. Division publications are distributed upon completion. Out of print publications may be examined in the Division's Resource Center, State Library, and at most college and university libraries in Virginia.

1 Bibliography of Virginia geology and mineral resources - 1960-1969 , by F.B. Hoffer, 68 p., 1977.	\$4.00
2 Geology of the Blairs, Mount Hermon, Danville, and Ringgold quadrangles, Virginia , by W.S. Henika and P.A. Thayer, 45 p., 2 maps, 30 figs., 5 tables, 1977.	\$4.00
3 Geology of the Waynesboro East and Waynesboro West quadrangles, Virginia , by T.M. Gathright, II, W.S. Henika, and J.L. Sullivan, III, 53 p., 2 maps, 38 figs., 7 tables, 1977.	Out of Print
4 Geology of the Greenfield and Sherando quadrangles, Virginia , by M.J. Bartholomew, 43 p., 2 maps, 37 figs., 5 tables, 1977.	\$4.00
5 Geology of the Omega, South Boston, Cluster Springs, and Virgilina quadrangles, Virginia , by R.D. Kreisa, 22 p., 2 maps, 18 figs., 4 tables, 1980.	\$4.00
6 Bouguer gravity in southwestern Virginia , by S.S. Johnson, 27 p., 2 maps, 1 fig., 1977.	\$4.00
7 Contributions to Virginia geology - III , 154 p., 61 figs., 21 tables, 1978. Contents include: The Calver years — 1957-1978. Production of mineral resources in Virginia, by D.C. Le Van. Geophysical characteristics of the Blue Ridge anticlinorium in central and northern Virginia, by S.S. Johnson and T.M. Gathright, II. Topographic maps of Virginia, by H.W. Webb, Jr. Ordovician shelf-to-basin transition, Shenandoah Valley, Virginia, by E.K. Rader and W.S. Henika. Sand and gravel resources in Virginia, by P.C. Sweet. Stream-sediment geochemistry of the Irish Creek tin district, Rockbridge County, Virginia, by O.M. Fordham, Jr. Rare-earth and thorium mineralization in southeastern Rappahannock County, Virginia, by C.R. Halladay. Geology and geophysics of Warren County, by E.K. Rader and S.S. Johnson. Correlation of stream-sediment mineralogy with geology, central Piedmont of Virginia, by R.S. Good. Geology of the Piedmont of Virginia-Interpretations and problems, by J.F. Conley.	\$4.00
8 Geology of the Norfolk North quadrangle, Virginia , by W.J. Barker and E.D. Bjorken, geologic map with map text, 1978. One sheet.	\$4.00
9 Geology of the Norfolk South quadrangle, Virginia , by W.J. Barker and E.D. Bjorken, geologic map with map text, 1978. One sheet.	\$4.00
10 Geology of the Grottoes quadrangle, Virginia , by T.M. Gathright, II, W.S. Henika, and J.L. Sullivan, III, geologic map with map text, 1978. One sheet.	\$4.00
11 Geology of the Mount Sidney quadrangle, Virginia , by T.M. Gathright, II, W.S. Henika, and J.L. Sullivan, III, geologic map with map text, 1978. One sheet	\$4.00
12 Geology of the Fort Defiance quadrangle, Virginia , by T.M. Gathright, II, W.S. Henika, and J.L. Sullivan, III, geologic map with map text, One sheet	1978. \$4.00
13 Geology of the Crimora quadrangle, Virginia , by T.M. Gathright, II, W.S. Henika, and J.L. Sullivan, III, geologic map with map text, 1978. One sheet.	\$4.00
14 Geology of the Blacksburg quadrangle, Virginia , by M.J. Bartholomew and W.D. Lowry, geologic map with map text, 1979. One sheet.	Out of Print
15 Geologic factors affecting land modification in Warren County, Virginia , by E.K. Rader and H.W. Webb, environmental-geologic map with map text, 1979. One sheet	\$4.00
16 Geology of the Abingdon, Wyndale, Holston Valley, and Shady Valley quadrangles, Virginia , by C.S. Bartlett, Jr. and T.H. Biggs, 39 p., 2 maps, 16 figs., 6 tables, 1980.	\$4.00
17 Geology of the Massies Corner quadrangle, Virginia , by M.T. Lukert and C.R. Halladay, geologic map with map text, 1980. One sheet.	\$4.00
18 Geology of the Bon Air quadrangle, Virginia , by B.K. Goodwin, geologic map with map text, 1980. One sheet.	\$4.00
19 Gold in Virginia , by P.C. Sweet, 77 p., 31 maps, 16 figs., 2 tables, 1980.	\$8.00
20 Geology of the Oak Grove core , 88 p., 45 figs., 2 tables, 1980. Contents include: Tertiary lithostratigraphy of the core, by Jurgen Reinhardt and others. Biostratigraphy of the Tertiary strata of the core, by T.G. Gibson and others. Lower Cretaceous stratigraphy of the core, by Jurgen Reinhardt and others. Lithologic log of the core, by James Estabrook and Jurgen Reinhardt.	\$4.00
21 Geology of the Whitmell and Brosville quadrangles, Virginia , by Van Price and others, geologic map with map text, 1980. One sheet.	\$4.00
22 Geology of the Axton and Northeast Eden quadrangles, Virginia , by Van Price and others, geologic map with map text, 1980. One sheet.	\$4.00
23 Geologic structure and hydrocarbon potential along the Saltville and Pulaski thrusts in Southwestern Virginia and Northeastern Tennessee . Six sheets, 1980. Contents include: Part A. Regional structure and hydrocarbon potential by M.J. Bartholomew and others (2 sheets). Part B. Deformation in the hanging wall of the Pulaski thrust sheet near Ironto, Montgomery County, Virginia by M.J. Bartholomew and A.P.	\$4.00

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

Schultz, Jr.(2 sheets).	
Part C. Saltville fault footwall structure at Stone Mountain, Hawkins County, Tennessee by R.C. Milici (2 sheets).	
24 Simple Bouguer gravity anomaly map of the Culpeper basin and vicinity, Virginia , by M.A. Wise and S.S. Johnson, map with text and gravity contours, 1980.	\$4.00
25 Geology of the Willis Mountain quadrangle, Virginia , by J.D. Marr, Jr., geologic map with map text, 1980. One sheet.	\$4.00
26 Geology of the Andersonville quadrangle, Virginia , by J.D. Marr, Jr., geologic map with map text, 1980. One sheet.	\$4.00
27 Contributions to Virginia geology - IV , 63 p., 1980. Contents include:	\$4.00
Evidence for the correlation of the Willis and Woods mountains with the Arvonian Formation, by J.F. Conley and J.D. Marr, Jr.	
Conodonts from structural windows through the Bane dome, Giles County, Virginia, by J.E. Repetski and W.J. Perry, Jr.	
Geology of the Taylorsville basin, Hanover County, Virginia, by R.E. Weems.	
Metallic mineralization in the Blue Ridge province of Virginia, by P.C. Sweet and S.C. Bell.	
Tetravalent manganese oxide minerals from the Red Bush Mine, Craig County, Virginia, by C.R. Halladay.	
28 Lineament and fracture trace analysis and its application to oil exploration in Lee County, Virginia , by T.M. Gathright, II, 40 p., 21 figs., 1 table, 1981.	\$4.00
29 Geologic investigations in the Willis Mountain and Andersonville quadrangles, Virginia , 83 p., 6 plates, field trip log, 1981.	\$4.00
Contents include:	
Stratigraphy and structure, by J.D. Marr, Jr.	
Regional geophysics, by S.S. Johnson.	
Geochemical exploration and sulfide mineralization, by R.S. Good.	
Selected mineral resources, by P.C. Sweet.	
30 Geology of the Hanover Academy quadrangle, Virginia , by R.E. Weems, geologic map with map text, 1981. One sheet.	\$4.00
31 Geology of the Glen Allen quadrangle, Virginia , by B.K. Goodwin, geologic map with map text, 1981. One sheet.	\$4.00
32 High-silica resources of Augusta, Bath, Highland, and Rockbridge counties, Virginia , by P.C. Sweet, 22 p., 20 illus., 14 tables, 1981.	\$4.00
33 Analyses of coal samples collected 1975-77 , by J.A. Henderson, Jr., C.S. Oman, and S.L. Coleman, 135 p., 6 figs., 10 tables, 1981.	Out-of-print
34 Geology of the Roanoke and Stewartville quadrangles, Virginia , by M.J. Bartholomew, 23 p., 22 figs., 2 maps in color, 2 tables, 1981.	\$4.00
35 Geology of the Villamont and Montvale quadrangles, Virginia , by W.S. Henika, 18 p., 3 figs., 2 maps in color, 4 tables, 1981.	\$4.00
36 Virginia clay material resources , by P.C. Sweet, 178 p., 41 illus., 2 tables, 1982.	\$4.00
37 Valley and Ridge stratigraphic correlations, Virginia , by E.K. Rader, 22 x 34 inch chart, 1982.	Out of Print
38 A vein-type uranium environment in the Precambrian Lovingson Formation, central Virginia , by T.A. Baillieu and P.L. Daddazio, 12 p., 12 figs., 3 tables, 1982.	\$4.00
39 Bibliography of Virginia coal , by G.P. Wilkes and J.A. Henderson, Jr., 18 p., 1983.	\$4.00
40 Total-count aeroradiometric contour map of the Culpeper basin and vicinity, Virginia , by B.D. Leavy, A.E. Grosz, and S.S. Johnson, map with text and aeroradiometric contours, 1982.	Out of Print
41 Aeromagnetic contour map of the Culpeper basin and vicinity, Virginia , by S.S. Johnson and A.J. Froelich, map with text and aeromagnetic contours, 1982.	\$4.00
42 Stratigraphic cross sections for the Upper Mississippian - Middle Pennsylvanian units of Buchanan and Dickenson counties, southwest Virginia , by M.L. Mitchell, M.S. Morris, J.K. Polzin, J.E. Nolde, and J.H. Grantham, 1982. Four sheets.	Out of Print
43 Relationship of stratigraphy to occurrence of oil and gas in western Virginia , by D.C. Le Van and E.K. Rader, one sheet, 1983.	\$4.00
44 Selected karst features of the northern Valley and Ridge province, Virginia , by D.A. Hubbard, Jr., one sheet, 1983.	\$4.00
45 Virginia gold resource data , by P.C. Sweet and David Trimble, 196 p., 1983 (Reprint 2001).	\$11.00
46 Coal-bed methane resource evaluation, Montgomery County, Virginia , by C.B. Stanley, and A.P. Schultz, 59 p., 1983.	\$4.00
47 Simple Bouguer gravity anomaly map of the Farmville, Briery Creek, Roanoke Creek, Randolph, and Scottsburg basins and vicinity, Virginia , by S.S. Johnson, G.P. Wilkes, and T.L. Zeiler, map with text and gravity contours, 1985.	\$4.00
48 Geologic map of the Spring Garden quadrangle, Virginia , by W.S. Henika and P.A. Thayer, colored map with explanation, 1983.	\$4.00
49 Geologic map of the Pittsville and Chatham quadrangles, Virginia , by J.D. Marr, Jr., colored map with explanation, 1984.	\$4.00
50 Wells drilled for natural gas in Buchanan County, Virginia , by J.J. Arnold, topographic map with symbols, one sheet, 1985.	\$4.00
51 Selected Virginia mineral resource information , by P.C. Sweet and W.D. Rowe, Jr., 28 page text with maps and tables, 1984.	\$4.00
52 Geology of the Prater and Vansant quadrangles, Virginia , by J.E. Nolde, M.L. Mitchell, and J.K. Polzin, multicolored geologic map with 28 page text, 1984.	\$4.00
53 Simple Bouguer gravity anomaly map of the Richmond and Taylorsville basins and vicinity, Virginia , by S.S. Johnson, G.P. Wilkes, and M.R. Gwin, map with text and gravity contours, 1985.	\$4.00
54 Coal resources data on federal lands in Virginia , by M.R. Gwin and J.A. Henderson, Jr., 152 p., 1984.	\$4.00
55 Geologic features related to coal mine roof falls - A guide for miner training , by R.C. Milici and T.M. Gathright, II, 13 p., 1985.	\$4.00
56 Eden in peril: The troubled waters of the Chesapeake Bay , by S.O. Bird, 27 p., 1985.	\$4.00
57 Post-Martinsburg Ordovician stratigraphy of Virginia and West Virginia , by R.J. Diecchio, 77 p., 27 figs., 1985.	\$4.00

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

58 Simple Bouguer gravity anomaly map of the Danville-Dan River basin and vicinity, Virginia-North Carolina and the Scottsville basin and vicinity, Virginia, by S.S. Johnson, L.S. Wiener, and J.F. Conley, map with text and gravity contours, 1985.	\$4.00
59 Geology of the southwestern Virginia Piedmont, by J.F. Conley, 33 p., with color map, 1985.	\$4.00
60 Geology of the Harrisonburg and Bridgewater quadrangles, Virginia, by T.M. Gathright, II and P.S. Frischmann, 21 p., with color map, 1986.	\$4.00
61 Thomas Jefferson and American vertebrate paleontology, by S.A. Bedini, 26 p., 17 figs., 1985.	\$4.00
62 Minerals for Virginia, by H.W. Webb and J.P. Moore, 36 p., 29 figs., 1 table, 1985.	\$4.00
63 Analyses of Virginia coal samples collected 1978-1980, by J.A. Henderson, Jr., G.P. Wilkes, L.J. Bragg, and C.L. Oman, 56 p., 1985.	Out of Print
64 Geology of the Ashland quadrangle, Virginia, by R.E. Weems, color map with explanation, 1986.	\$4.00
65 Geology of the Norton quadrangle, Virginia, by J.E. Nolde, J.A. Lovett, W.W. Whitlock, and R.L. Miller, color map with explanation, 1986.	\$4.00
66 Part 1: Interpretive seismic profile along Interstate I-64 in central Virginia from the Valley and Ridge to the Coastal Plain, by L.D. Harris, Wallace deWitt, Jr., and K.C. Bayer, one two-color sheet modified from U.S. Geological Survey Chart OC-123, 1986.	\$4.00
Part 2: Not printed.	
67 High-silica resources in Alleghany, Botetourt, Craig, and Roanoke counties, Virginia, by P.C. Sweet and G.P. Wilkes, 22 p., 1986.	\$4.00
68 Clay-material samples collected 1981-1984, by P.C. Sweet, 107 p., 1986.	\$4.00
69 Geologic map of Giles County, Virginia, by A.P. Schultz, C.B. Stanley, T.M. Gathright, II, E.K. Rader, M.J. Bartholomew, S.E. Lewis, and N.H. Evans, full color map, one sheet, 1986.	\$4.00
70 Selected slope categories and karst features map of Giles County, Virginia, by E.V. Miller and D.A. Hubbard, Jr., one two-color sheet, 1986.	\$4.00
71 Geology of the Virginia portion of the Flat Gap quadrangle, Virginia, by J.E. Nolde, W.W. Whitlock, and J.A. Lovett, full color map, one sheet, 1988.	\$4.00
72 Geology of the Virginia portion of the Appalachia and Benham quadrangles, Virginia, by J.E. Nolde, J.A. Henderson, Jr., and R.L. Miller, full color map, one sheet, 1988.	\$4.00
73 Geology and petroleum potential of Mesozoic and Cenozoic rocks, offshore Virginia, by K.C. Bayer and R.C. Milici, 1987.	
Part A. Geologic interpretations of offshore seismic lines.	\$4.00
Part B. Interpretative geologic contour maps.	\$4.00
Part C. Onshore-offshore seismic stratigraphic correlations.	\$4.00
Part D. Text.	\$4.00
74 Contributions to Virginia geology - V, 80 p., 1987. Contents include:	\$4.00
Pre-Taconian deformation in the Piedmont of the Potomac Valley - Penobscotian, Cadomian or both?, by A.A. Drake.	
Relationships of structure to massive sulfide deposits in the Chopawamsic Formation of central Virginia, by J.F. Conley.	
Lithostratigraphy and biostratigraphy of the Martinsburg Formation in southwestern Virginia, with descriptive sections, by R.D. Kreisa and D.A. Springer.	
Mafic rocks in the Alligator Back Formation, the upper unit of the Lynchburg Group, in the southwestern Virginia Piedmont: An ophiolite sequence? by J.F. Conley.	
Geology of the Mobley Mountain granite Piney River quadrangle, Virginia Blue Ridge, by J.C. Brock, Norman Herz, Douglas Mose, and Susan Nagel.	
75 The Quaternary of Virginia - A symposium volume, edited by J.M. McDonald and S.O. Bird, 18 articles and abstracts, 137 p., 1986.	\$4.00
76 Clay material testing program, 1957-1986, by P.C. Sweet, 46 p., 1 map, 11 figures, 4 tables, 1988.	\$6.00
77 Geologic map of the Sandy Level and Callands quadrangles, Virginia, by C.R. Berquist, Jr., color map, one sheet, 1988.	\$11.00
78 Geochemistry and radioactivity in the Powhatan area, Virginia, by Jan Krasen, S.S. Johnson, P.D. Finley, and J.D. Marr, Jr., 60 p., 9 plates, 29 figs., 16 tables, 1988.	\$9.25
79 Geology of the East Stone Gap quadrangle, Virginia, by W.S. Henika, two sheets, one color, 1988.	\$8.00
80 Geology of the Wise quadrangle and the coal-bearing portion of the Fort Blackmore quadrangle, Virginia, by W.W. Whitlock, J.A. Lovett, and R.N. Diffenbach, color map, one sheet, 1988.	\$8.50
81 Geology of the Coeburn quadrangle and the coal-bearing portion of the Dungannon quadrangle, Virginia, by J.E. Nolde and R.N. Diffenbach, color map, one sheet, 1988.	\$6.50
82 Coal, oil and gas, and industrial and metallic minerals industries in Virginia, 1985, by P.C. Sweet, 39 p., 1 map, 6 figures, 19 tables, 1988.	\$7.50
83 Selected karst features of the central Valley and Ridge province, Virginia, by D.A. Hubbard, Jr., one sheet, 1988.	\$7.00
84 Geology of the Pound and Caney Ridge quadrangles, Virginia, by J.E. Nolde, W.W. Whitlock, and J.A. Lovett, 8 p., color map, 1988.	\$8.75
85 Mining history of the Richmond coalfield of Virginia, by G.P. Wilkes, 51 p., 1 plate, 26 figs., 1988.	\$7.00
86 Geology of the Virginia portion of the Clintwood and Jenkins East quadrangles, Virginia, by R.N. Diffenbach, color map with map text, 1988.	\$8.50
87 Geology and mineral resources of the Brandon and Norge quadrangles, Virginia, by G.H. Johnson and C.R. Berquist, Jr., 28 p., color map, 1989.	\$11.00
88 Contributions to Virginia geology - VI, edited by N.H. Evans, 91 p., 1989. Contents include:	\$7.00
Vein copper mineralization of the Virgilina district, Virginia and North Carolina, by N.E. Johnson, J.R. Craig, and J.D. Rimstidt.	
Exploration for magnetic sulfide deposits in the Virginia Blue Ridge, by Carol Walsh-Stovall, E.S. Robinson, J.D. Rimstidt, and R.L. Stovall.	

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

Mineralogy and geochemistry of the lead-zinc ores of the Austinville-Ivanhoe district, Wythe County, Virginia, by N.K. Foley and J.R. Craig.	
Interpretation of gravity and magnetic anomalies of the Richmond Triassic basin, by A.A. Nowroozi and Arnold Wong.	
Gravity anomalies and geology in the Blue Ridge province near Floyd, Virginia, by R.L. Stovall, E.S. Robinson, and M.J. Bartholomew.	
Pillow lavas in the Catoctin Formation of central Virginia, by E.W. Spencer, Christopher Bowring, and J.D. Bell.	
89	Minerals of Albemarle County, Virginia , by R.S. Mitchell and W.F. Giannini, 19 p., 16 figs., 1988. \$5.00
90	Part A. Geologic map of the Rocky Mount and Gladehill quadrangles, Virginia , by M.B. McCollum, color map with explanation, 1989. \$10.50
	Part B. Geologic map of the Penhook and Mountain Valley quadrangles, Virginia , by J.F. Conley, R.G. Piepul, G.R. Robinson, Jr., E.M. Lemon, Jr., and C.R. Berquist, Jr., color map with explanation, 1989. \$10.50
	Part C. Geology of the Rocky Mount, Gladehill, Penhook, and Mountain Valley quadrangles, Virginia , by J.F. Conley, 15 p., one map, 1989. \$6.00
	Pub. 90, Parts A, B, and C as a package \$20.00
91	Geology of the Haysi quadrangle, Virginia , by W.S. Henika, color map with map text, 1989. \$7.00
92	Geology of the Nora quadrangle, Virginia , by R.N. Diffenbach, color map with map text, 1989. \$7.00
93	Copper, lead, and zinc resources in Virginia , by P.C. Sweet, R.S. Good, J.A. Lovett, E.V.M. Campbell, G.P. Wilkes, and L.L. Myers, 185 p., 1989. \$8.00
94	Exposed and inferred Early Mesozoic basins onshore and offshore, Virginia , by G.P. Wilkes, S.S. Johnson, and R.C. Milici, 2 two-color maps, 1:500,000, 1989. \$7.50
95	Coal, oil and gas, and industrial and metallic minerals industries in Virginia, 1986 - 1987 , by P.C. Sweet, 33 p., 1 map, 5 figures, 31 tables, 1989. \$7.50
96	Geology of the Keen Mountain quadrangle, Virginia , by J.E. Nolde, full-color map with text, one-sheet, scale 1:24,000, 1989 \$7.00
97	Geology of the Grundy quadrangle, Virginia , by A.R. Taylor, full-color map with text, one-sheet, scale 1:24,000, 1989. \$7.00
98	Geology of the Virginia portion of the Harman and Jamboree quadrangles , by W.S. Henika, full-color map with text, one-sheet, scale 1:24,000, 1989. \$7.00
99	Geology of the Virginia portion of the Patterson, Bradshaw, and War quadrangles , by W.W. Whitlock, full-color map with text, one-sheet, scale 1:24,000, 1989. \$7.00
100	Energy resources and facilities in Virginia , by D.C. Le Van, one-sheet, scale 1:500,000, 1990. \$6.00
101	Travertine-marl: stream deposits in Virginia , edited by J.S. Herman and D.A. Hubbard, Jr., 184 p., 1990. \$8.00
102	Geologic map of Clarke County, Virginia - Plate 1; Map of hydrogeologic components for Clarke County, Virginia - Plate 2 , by D.A. Hubbard, Jr., 1990. \$13.00
103	Heavy-mineral Studies - Virginia Inner Continental Shelf , edited by C.R. Berquist, Jr., 124 p., 1990. \$9.00
104	Evaluating the impact of multi-seam mining on recoverable coal reserves in an adjacent seam , by Yingxin Zhou, 22 p. with 5.25" computer disk, 1991. \$7.75
105	Physiographic diagram of Virginia , by Edgar Bingham with geologic cross section by Jack Lee Mason, scale 1:750,000, 1991. \$5.00
106	Geology of the St. Paul and Carbo quadrangles, Virginia , by N.H. Evans and K.W. Troensegaard, scale 1:24,000, full-color, 1991. \$9.00
107	Geology and mineral resources of the Boswells Tavern and Keswick quadrangles, Virginia , by D.L. Rossman, 19 p. 16 figures, 4 tables, geologic map scale 1:24,000, full-color, 1991. \$9.50
108	Analyses of carbonate rocks - northern Virginia , by W.F. Giannini, 104 p., 1991. \$11.00
109	Geology of the coal-bearing portion of the Richlands quadrangle, Virginia , by K.J. Englund and B.A. Couzens, scale 1:24,000, full-color, 1991. \$7.00
110	Geology of the coal-bearing portion of the Tazewell North, Tip Top, and Gary quadrangles, Virginia , by B.A. Couzens, K.J. Englund, and R.E. Thomas, scale 1:24,000, full-color, 1991. \$7.00
111	Coal resource estimate for Lee County, Virginia , by E.V.M. Campbell, J.A. Henderson, Jr., and L.L. Myers, 61 p., 1991. \$9.50
112	Gold mineralization, and tin, base metals, and thorium anomalies at Yankee Horse Ridge, Irish Creek tin area, Rockbridge County, Virginia , by R.S. Good, 41 p., 39 figures, 2 tables, 15 appendices, 1991. \$7.75
113	Oil and gas well data and geology, Lee County, Virginia , by J. E. Nolde, 13 pages, 2 full color maps, scale 1:50,000, 1992. \$9.25
114	Coal, oil and gas, and industrial and metallic minerals industries in Virginia, 1988-1989 , by P.C. Sweet, 23 p., 8 figures, 22 tables, 1 map, 1991. \$7.75
115	Tantalum and niobium resources in Virginia , by W.F. Giannini and P.C. Sweet, 28 p., 14 figures, 2 tables, 1991. \$6.75
116	Stratigraphy of the Waynesboro Formation (Lower and Middle Cambrian) near Buchanan, Botetourt County, Virginia , by J.T. Haynes, 22 p., 18 figures, 2 appendices, 1991. \$7.00
117	Structure of the Bane dome, Giles County, Virginia - a gravity test , by M.J. Moses and E.S. Robinson, 21 p., 10 figures, 1 appendix, 1991. \$7.00
118	Available coal resource study of Appalachia 7.5-minute quadrangle, Virginia-Kentucky , by R.S. Sites and K.K. Hostettler, 51 p., 33 figures, 22 tables, 1991. \$8.50
119	Proceedings - 26th Forum on the geology of industrial minerals , edited by P. C. Sweet, 188 pages, 1992. \$8.50
120	Bibliography of Virginia geology and mineral resources 1970-1979 , by F.B. Hoffer, 162 pages, 1992. \$13.75
121	Geology of the Virginia portion of the Hurley, Panther, Wharnccliffe, and Majestic quadrangles , by J.A. Lovett, W.W. Whitlock, W.S. Henika, and R.N. Diffenbach, 10 pages, geologic map, scale 1:24,000, full-color, 1992. \$8.25

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

122	Coal sample analyses from the Southwest Virginia coalfield , by G.P. Wilkes, L.J. Bragg, K.K. Hostettler, C.L. Oman, and S.L. Coleman, 431 pages, 51 figures, 40 tables, 3 appendices, 1992.	\$19.00
123	Bibliography and index of Virginia geology , 1980-1989, 354 pages, 1992.	\$13.00
124	The Valley coalfield (Mississippian age) in Montgomery and Pulaski counties, Virginia , by M.J. Bartholomew and K.L. Brown, 33 pages, map 1:100,000, 1992.	\$7.00
125	Coal, oil and gas, and industrial and metallic minerals industries in Virginia, 1990 , by P.C. Sweet and J.E. Nolde, 17 pages, 6 figures, 11 tables, 1992.	\$5.50
126	Reinterpretation of Rocklandian (Upper Ordovician) K-bentonite stratigraphy in Southwest Virginia, Southern West Virginia, and Northeast Tennessee with a discussion of the conglomeratic sandstones in the Bays and Moccasin Formations , by J.T. Haynes, 58 pages, 27 figures, 4 tables, 3 appendices, 1992.	\$8.50
127	Pliocene Molluscs from the Yorktown and Chowan River Formations in Virginia , by L.D. Campbell, 259 pages, 3 figures, 5 tables, 43 plates, 1993.	Out of Print
128	Coal, oil and gas, and industrial and metallic minerals industries in Virginia, 1991 , by P.C. Sweet and J.E. Nolde, 18 pages, 4 figures, 12 tables, 1:1,000,000 scale map, 1993.	\$6.50
129	Directory of the mineral industry in Virginia — 1993 , by P.C. Sweet, 29 pages, 1:1,000,000 scale map, 1993.	Out of Print
130	Catalogue of fieldtrip guidebooks and road logs , by C.B. Devan, 40 pages, 1993.	\$6.00
131	Geology and mineral resources of the Southwest Virginia coalfield , by J.E. Nolde, W.W. Whitlock, J.A. Lovett, and W.S. Henika, 142 pages, 6 plates, 1994. (Digital Reprint 2005).	\$15.00
132	Studies in eastern energy and the environment , edited by A.P. Schultz and E.K. Rader, 188 pages, 1994.	\$9.50
133	Coal, oil and gas, and industrial and metallic minerals industries in Virginia - 1992 , by P.C. Sweet and J.E. Nolde, 30 pages, 5 figures, 12 tables, 1994.	\$6.00
134	Geology of the Simeon quadrangle, Virginia , by N.H. Evans, scale 1:24,000, full-color map with text, 1994.	\$8.50
135	Analysis of carbonate rocks - northwestern Virginia (Elkins-Staunton 0.5° x 1° quadrangles) , by W.F. Giannini and K.K. Hostettler, 160 pages, 57 figures, 66 tables, 8 appendices, 1994.	\$13.25
136	Coal beds, coal zones, and key stratigraphic names in the Pennsylvanian units of Southwestern Virginia , by J. E. Nolde, chart with text, one sheet, 1994.	\$7.50
137	Geology and mineral resources of Henry County and the City of Martinsville, Virginia , by W. S. Henika, J. F. Conley, and P. C. Sweet, 22 pages, 15 figures, 2 tables, 2 maps, scale 1:50,000, 1996.	\$12.25
138	Geologic map of Warren County, Virginia , by E. K. Rader and J. F. Conley, full-color, scale 1:50,000, 1995.	\$8.00
139	Coal, oil and gas, and industrial and metallic minerals industries in Virginia, 1993 , by P.C. Sweet and J. E. Nolde, 27 pages, 13 figures, 11 tables, map 1:1,000,000, 1995.	\$9.50
140	Structural section across the Atlantic coastal plain, Virginia and southeasternmost Maryland , by R. C. Milici, J. K. Costain., C. Coruh and P. A. Pappano, 2 plates with text, 1995.	\$8.75
141	Bibliography and index of Virginia geology , 1990-1994, 129 pages, 1995.	\$8.50
142	Coal, oil and gas, industrial and metallic minerals industries in Virginia, 1994 , by P. C. Sweet and J. E. Nolde, 26 pages, 12 figures, 11 tables, 1996.	\$8.75
143	Geologic map of Clarke, Frederick, Page, Shenandoah, and Warren counties: Lord Fairfax Planning District , by E. K. Rader, R. C. McDowell, T. M. Gathright, II, and R. C. Orndorff, full-color map with explanation, scale 1:100,000, 1996.	\$8.25
144	Geology, natural gas, oil, and other mineral resources of Wise County, Virginia , by J. E. Nolde, 38 pages, 8 figures, 7 tables, 1:50,000 scale full color map, 1996.	\$12.50
145	Composite Devonian and Lower Mississippian section near Norton, Virginia , by J. K. Filer, J. M. Dennison, and A. G. Warne, two 34" x 44" sheets with 9 illustrations and text, 1996.	\$9.50
146	Coal, oil and gas, and metallic and industrial minerals industries in Virginia, 1995 , by P. C. Sweet and J. E. Nolde, 27 pages, 14 figures, and 12 tables, 1997.	\$6.00
147	Metallic mines, prospects, and occurrences in the gold-pyrite belt of Virginia , by D. B. Spears, and M. L. Upchurch, 73 pages, 33 tables, 33 1:50,000 scale maps, 1 color 250,000 scale map, 1997.	\$8.00
148	Geologic map of the Roanoke 30 x 60 minute quadrangle, Virginia , by W. S. Henika, full-color map, scale 1:100,000, with explanation, 1997.	\$9.00
149	Virginia's coal ages , by S. O. Bird, 24 pages, 6 plates, 16 figures, 2 tables, 1997.	\$5.00
150	Coal, oil and gas, and industrial and metallic minerals industries in Virginia, 1996 , by P. C. Sweet, and J. E. Nolde, 27 pages, 14 figures, 12 tables, 1997.	\$8.00
151	Coal, oil and gas, and industrial and metallic minerals industries in Virginia, 1997 , by P. C. Sweet and J. E. Nolde, 25 pages, 16 figures, 12 tables, 1998	\$9.50
152	Early Eocene vertebrates and plants from the Fisher/Sullivan site (Nanjemoy Formation) Stafford County, Virginia , edited by R. E. Weems and G. J. Grimsley, 159 pages, 8 papers on various fossil groups, 1999.	\$11.00
153	Coal, oil and gas, and industrial and metallic minerals industries in Virginia, 1998 , by P. C. Sweet and J. E. Nolde, 25 pages, 14 figures,	

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

13 tables, 1999.	\$9.25
154 Geology of the Glasgow and Buena Vista quadrangles, Virginia with cross sections and structural maps , by Edgar W. Spencer, Parts A, B, and C, color 1:24,000 geologic maps, 2000.	\$10.60
155 Geologic map of the Virginia portion of Elkins 30 x 60 minute quadrangle, Virginia , by E. K. Rader and G. P. Wilkes, color 1:100,000 scale geologic map, 2000.	\$7.00
156 Geologic map of the Virginia portion of Peterstown quadrangle , by T.M. Gathright, II and E.K. Rader, color 1:24,000-scale geologic map, 2001.	\$7.75
157 Bedrock geology of the Madison quadrangle, Virginia , by C. M. Bailey, P. J. Berquist, S. M. Mager, B. D. Knight, N. L. Shotwell, and A. K. Gilmer, 22 pages, color 1:24,000-scale geologic map, 2003.	\$12.00
158 A hydrogeologic database for Fluvanna County, Virginia , by Nick H. Evans and Karen K. Hostettler, CD ROM contains 1:62,500-scale digital geologic map based on VDMR Bulletin 79, MS Access 97 database of selected water well completion report information, archives of water well completion reports in pdf, with viewing software included. Intended for the Windows 9x, Windows NT, Windows 2000 operating systems, 2001.	Out of Print
159 Geologic map of the Augusta, Page, and Rockingham counties portion of the Charlottesville 30 x 60 minute quadrangle, Virginia , compiled by Eugene K. Rader and Thomas M. Gathright, II, color 1:100,000-scale geologic map, 2001.	\$7.50
160 Geologic map of the Virginia portion of the Lindsie quadrangle , by A.P. Schultz and C.B. Stanley, color 1:24,000-scale geologic map, 2001.	\$6.50
161 Geologic map of the Virginia portion of the Winchester 30 x 60 minute quadrangle , by Eugene K. Rader, Robert C. McDowell, Thomas M. Gathright, II, and Randall C. Orndorff, color 1:100,000-scale geologic map, 2001.	\$7.50
162 Geologic map of the Front Royal 30 x 60 minute quadrangle: portions of Clarke, Page, Rockingham, Shenandoah, and Warren counties, Virginia , by Eugene K. Rader, Thomas M. Gathright, II, color 1:100,000-scale geologic map, 2001.	\$10.00
163 Geologic map of the Virginia portion of the Staunton 30 x 60 minute quadrangle , by Eugene K. Rader and Gerald P. Wilkes, color 1:100,000-scale geologic map, 2001.	\$10.00
164 Directory of the mineral industry in Virginia - 2001 , by P. C. Sweet, 24 pages, 2001.	\$6.00
165 Geologic map of the western portion of the Richmond 30 x 60 minute quadrangle , by J.D. Marr, Jr., , color 1:100,000-scale map with text, 2002.	\$12.00
166 Geologic map of the Virginia portion of the Danville 30 x 60 minute quadrangle , by W.S. Henika, , color 1:100,000-scale map with text, 2002.	\$10.00
167 Selected karst features of the southern Valley and Ridge Province, Virginia , by D. A. Hubbard, Jr., color 1:125,000-scale map with text, 2001.	\$9.00
168 To Be Published	
169 Geologic map of the Virginia portion of the Lewisburg 30 x 60 minute quadrangle , by G.P. Wilkes, , color 1:100,000-scale geologic map, 2002.	\$7.20
170 To Be Published	
171 Part A: Raster images of the geologic map of the Virginia portion of the Winchester 30x60 minute quadrangle , by E.K. Rader, R.C. McDowell, T.M. Gathright, II, and R.C. Orndorff Part B: Digital geospatial data for the geologic map of the Virginia portion of the Winchester 30x60 minute quadrangle , by Virginia Division of Mineral Resources, ESRI shapefiles with accompanying text including metadata files, 2003.	\$15.00
172 Geology of the Damascus and Laurel Bloomery Quadrangles, Virginia , by William W. Whitlock and James R. Derby, color 1:24,000-scale geologic map and text, single sheet, 2005.	\$15.00
173 To Be Published	
174 Digital representation of the 1993 <i>Geologic Map of Virginia</i> , by Virginia Division of Mineral Resources, CD containing digital data files, raster images in tiff and gif format, data in ESRI shapefile format, revised expanded explanation as searchable pdf file, viewing software not included, 2003 December 31.	\$15.00
175 Digital reprint of T.L. Watson's 1907 <i>Mineral Resources of Virginia</i> , by Virginia Division of Mineral Resources, CD containing digital version as pdf file, Adobe Reader 5 or higher required, viewing software not included, 2003 September 1.	\$15.00
176 Early attempts of English mineral exploration in North America: The Jamestown Colony , by L. L. Heuvel, 40 pages, 2007.	\$6.00

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

BULLETINS

1	Lead and zinc deposits of Virginia , by T.L. Watson, 156 p., 14 pls., 27 figs., 1905.	Out of Print
2	Clay deposits of the Virginia coastal plain , by Heinrich Ries, with a chapter on The Geology of the Virginia Coastal Plain, by W.B. Clark and B.L. Miller, 184 p., 15 pls., 10 figs., 1906.	Out of Print
3	Hydrography of Virginia , by N.C. Grover and R.H. Bolster, 233 p., 10 pls., 1 fig., 1906.	Out of Print
1A	Annual report on the mineral production of Virginia (1908) , by T.L. Watson, 141 p., 1 pl., 25 figs., 1909.	Out of Print
2A	Cement resources of Virginia west of the Blue Ridge , by R.S. Bassler, with an introductory Chapter on the Materials and Manufacture of Hydraulic Cements by E.C. Eckel, 309 p., 30 pls., 30 figs., 1909.	Out of Print
3A	Geology of the titanium and apatite deposits of Virginia , by T.L. Watson and Stephen Taber, 308 p., 37 pls., 22 figs., 1913.	Out of Print
4	The physiography and geology of the coastal plain province of Virginia , by W.B. Clark and B.L. Miller, with chapters on The Lower Cretaceous by E.W. Berry and on The Economic Geology by T.L. Watson, 274 p., 19 pls, 1 fig, 1912.	Out of Print
5	Underground water resources of the coastal plain province of Virginia , by Samuel Sanford, 361 p., 1 pl., 8 figs., 11 tables, 1913.	Out of Print
6	Biennial report on the mineral production of Virginia (1909 and 1910) , by T.L. Watson, 123 p., 1 fig., 1911.	Out of Print
7	Geology of the gold belt in the James River basin, Virginia , by Stephen Taber, 271 p., 10 pls., 23 figs., 1913.	Out of Print
8	Biennial report on the mineral production of Virginia (1911 and 1912) , by T.L. Watson, with chapters on Zirconiferous Sandstone near Ashland, Virginia by T.L. Watson and F.L. Hess, and on the Geology of the salt and gypsum deposits of southwestern Virginia by G.W. Stose, 76 p., 2 pls., 8 figs., 1913.	Out of Print
9	Coal resources and general geology of the Pound quadrangle in Virginia , by Charles Butts, 61 p., 3 pls., 1 fig., 1914.	Out of Print
10	Surface water supply of Virginia , by G.C. Stevens, 247 p., 5 pls., 1916.	Out of Print
11	Physiography of the upper James River basin in Virginia , by F.J. Wright, 67 p., 13 pls., 7 figs., 1925.	Out of Print
12	Coal resources of the Clintwood and Bucu quadrangles, Virginia , by Henry Hinds, 206 p., 11 pls., 21 figs., 1916.	Out of Print
13	Clays of the Piedmont province, Virginia , by Heinrich Ries and R.E. Somers, 86 p., 15 pls., 1917.	Out of Print
14	Geology and ore deposits of the Virgilina district of Virginia and North Carolina , by F.B. Laney, 176 p., 20 pls., 16 figs., 1917.	Text Out of Print
	Map available only - no accompanying text.	\$5.00
15	Not printed.	
15A	Tin deposits near Irish Creek, Virginia , by H.G. Ferguson, 19 p., 3 figs., 1918.	Out of Print
16	Country about Camp Lee, Virginia , by A.W. Giles, 40 p., 20 pls., 8 figs., 1918.	\$4.00
17	Manganese deposits on the west foot of the Blue Ridge, Virginia , by G.W. Stose, H.D. Miser, F.J. Katz, and D.F. Hewett, 166 p., 22 pls., 16 figs., 1919.	Out of Print
18	Geology and coal resources of Buchanan County, Virginia , by Henry Hinds, with a chapter on The Forests of Buchanan County, Virginia, by W.G. Schwab, 278 p., 16 pls., 22 figs., 1918.	Out of Print
19	Geology and coal resources of the coal-bearing portion of Tazewell County, Virginia , by T.K. Harnsberger, 195 p., 14 pls., 17 figs., 1919.	Out of Print
20	Clays and shales of Virginia west of the Blue Ridge , by Heinrich Ries and R.E. Somers, 118 p., 14 pls., 8 figs., 1920.	Out of Print
21	Geology and coal resources of Dickenson County, Virginia , by A.W. Giles, 224 p., 18 pls., 21 figs., 1921.	Out of Print
22	Geology and coal resources of Russell County, Virginia , by C.K. Wentworth, with a chapter on the forests of Russell County, Virginia by J.W. O'Byrne, 179 p., 28 pls., 16 figs., 1922.	\$4.00
23	Manganese deposits of western Virginia , by G.W. Stose and H.D. Miser, 206 p., 31 pls., 39 figs., 1922.	Out of Print
24	Geology and mineral resources of Wise County and the coal-bearing portion of Scott County, Virginia , by J.B. Eby, with sections by M.R. Campbell and G.W. Stose and a chapter on The Forests of Wise County, Virginia by F.C. Pederson, 617 p., 45 pls., 55 figs., 1923.	Out of Print
25	Valley coal fields of Virginia , by M.R. Campbell, et. al. with a chapter on The Forests of the Valley Coal Fields of Virginia by F.C. Pederson, 322 p., 27 pls., 30 figs., 1925.	Out of Print
26	Geology and coal resources of the coal-bearing portion of Lee County, Virginia , by A.W. Giles, with a chapter of the forests of Lee County, Virginia by H.L. Baker, 216 p., 26 pls., 11 figs., 1925.	\$4.00
27	Oil and gas possibilities at Early Grove, Scott County, Virginia , by Charles Butts, 18 p., 2 figs., 1927.	\$4.00
28	Fensters in the Cumberland overthrust block in southwestern Virginia , by Charles Butts, 12 p., 2 pls., 1927.	Out of Print
29	Geology of the Virginia Triassic , by J.K. Roberts, 205 p., 32 pls., 19 figs., 1928.	Out of Print
30	Geology of the gold-pyrite belt of the northeastern Piedmont, Virginia , by J.T. Lonsdale, 110 p., 9 pls., 11 figs., 1927.	Out of Print
31	Water resources of Virginia , by J.J. Dirzulaitis and G.C. Stevens, 510 p., 9 pls., 1927.	Out of Print
32	Sand and gravel resources of the coastal plain of Virginia , by C.K. Wentworth, 146 p., 19 pls., 154 figs., 4 tables, 1930.	Out of Print
33	Pegmatite deposits of Virginia , by A.A. Pegau, 123 p., 20 pls., 11 figs., 9 tables, 1932.	Out of Print
34	Geology and mineral resources of the Roanoke area, Virginia , by H.P. Woodward, 172 p., 29 pls., 8 figs., 2 tables, 1932.	Out of Print
35	Caverns of Virginia , by W.M. McGill, 187 p., 48 pls., 23 figs., 4 tables, 1933.	Out of Print
36	Thermal springs of Virginia , by Frank Reeves, 56 p., 8 pls., 4 figs., 7 tables, 1932.	Out of Print

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

37	Lower York-James peninsula , by J.K. Roberts, 58 p., 21 pls., 7 figs., 7 tables, 1932.	Out of Print
38	Kyanite in Virginia, (including) Geology of the kyanite belt of Virginia , by A.I. Jonas and Economic aspects of kyanite, by J.H. Watkins, 52 p., 11 pls., 1 fig., 1 table, 1932.	Out of Print
39	James River iron and marble belt, Virginia , by A.S. Furcron, 124 p., 15 pls., 12 figs., 6 tables, 1935.	Out of Print
40	Marble prospects in Giles County, Virginia , by A.A. Mathews, with a section on Petrography of the Marbles by A.A. Pegau, 52 p., 9 pls., 7 figs., 3 tables, 1934.	Out of Print
41	Preliminary report on ground-water resources in northern Virginia , by R.C. Cady, 48 p., 1 pl., 3 figs., 17 tables, 1933.	\$4.00
42	Geologic map of the Appalachian Valley of Virginia with explanatory text , by Charles Butts, 1933. 1:250,000 scale black and white map reprinted 1992.	\$7.00
43	Zinc and lead region of southwestern Virginia, with a section on The Occurrences of zinc and lead in Virginia , by L.W. Currier, 122 p., 26 pls., 3 figs., 1 table, 1935.	Out of Print
44	Preliminary report on gold deposits of the Virginia Piedmont , by C.F. Park, Jr., 42 p., 9 pls., 14 figs., 2 tables, 1936.	Out of Print
45	Ground-water resources of the Shenandoah Valley, Virginia , by R.C. Cady, with Analyses by E.W. Lohr, 137 p., 5 pls., 2 figs., 22 tables, 1936.	\$4.00
46	Contributions to Virginia geology , 211 p., 22 pls., 10 figs., 1936. Contents include: Origin of our scenery, by Arthur Bevan. Prospecting for natural gas and petroleum in Virginia, by W.M. McGill. William Barton Rogers and his contribution to the geology of Virginia, by J.K. Roberts. Origin of Oriskany iron and manganese ores, by R.J. Holden. Humidity and waters of a limestone cavern near Lexington, Virginia, by Edward Steidtmann. An ebb and flow spring near Fairfield, Virginia, by M.H. Stow. The Natural Bridge of Virginia, by F.J. Wright. The origin of Mountain Lake, by H.S. Sharp. Stratigraphy of Ordovician bentonite beds in southwestern Virginia, by R.R. Rosenkrans. Mineralogy of two Virginia marbles, by Jane Kessler. Virginia's mineral contribution to the Confederacy, by R.S. Boyle. Stratigraphy and structure of the Marion area, Virginia, by B.N. Cooper. The Big A Mountain area, Virginia, by R.A. Bates.	Out of Print
47	Outline of the mineral resources of Virginia , by W.M. McGill, 81 p., 16 pls., 1 fig., 1 table, 1936.	Out of Print
48	Outline of the geology and mineral resources of Goochland County, Virginia , by C.B. Brown, 68 p., 10 pls., 2 figs., 5 tables, 1937.	Out of Print
49	Outline of the geology and mineral resources of Russell County, Virginia , by H.P. Woodward, 91 p., 13 pls., 9 figs., 8 tables, 1938.	Out of Print
50	Ground-water resources of northern Virginia , by R.C. Cady, 200 p., 7 pls., 5 figs., 42 tables, 1938.	Out of Print
51	Contributions to Virginia geology -II , 185 p., 26 pls., 21 figs., 1 table, 1939. Contents include: A southern limestone facies of Lower Cambrian dolomite in Wythe and Carroll counties, Virginia, by G.W. Stose and A.I. Jonas. Geology of Powell Valley in northeastern Lee County, Virginia, by R.L. Bates. Ridge-making sandstone in Frederick County, Virginia, by R.S. Edmundson. Varved slates in Fauquier County, Virginia, by L.R. Thiesmeyer. Geology and artesian-water resources of a part of the southern Virginia Coastal Plain, by D.J. Cederstrom. Notes on the Petersburg granite, by R.O. Bloomer. Origin of the narrow Cambrian belts north of Draper Mountain, Virginia, by B.N. Cooper. Geology of Little North Mountain in northern Virginia, by Charles Butts and R.S. Edmundson.	Out of Print
52	Geology of the Appalachian Valley in Virginia , by Charles Butts. Part I. Geologic text and illustrations , 586 p., 63 pls., 10 figs., 10 tables, 1940 (reprinted 1973). Part II. Fossil plates and explanations , by Charles Butts, 271 p., 72 pls., 1941.	Out of Print Out of Print
53	Barite deposits in Virginia , by R.S. Edmundson, 85 p., 15 pls., 15 figs., 2 tables, 1938.	Out of Print
54	Geology and mineral resources of the Warrenton quadrangle, Virginia , by A.S. Furcron, 94 p., 18 pls., 1 fig., 3 tables, 1939.	Out of Print
55	Geology of the Draper Mountain area, Virginia , by B.N. Cooper, 98 p., 23 pls., 4 figs., 1939.	Out of Print
56	Early Grove gas field, Scott and Washington counties, Virginia , by Paul Averitt, 50 p., 3 pls., 4 figs., 5 tables, 1941.	\$4.00
57	Eocene of Virginia , by Benjamin Gildersleeve, 43 p., 6 pls., 2 figs., 1 table, 1942.	Out of Print
58	Chloride in ground water in the Coastal Plain of Virginia , by D.J. Cederstrom, 36 p., 4 pls., 5 figs., 14 tables, 1943.	\$4.00
59	Manganese and quartzite deposits in the Lick Mountain district, Wythe County, Virginia , by F.W. Stead and G.W. Stose, 16 p., 8 pls., 3 figs., 3 tables, 1943.	Out of Print
60	Geology and mineral resources of the Burkes Garden quadrangle, Virginia , by B.N. Cooper, 299 p., 21 pls., 11 figs., 5 tables, 1944.	Out of Print
61	Geology and manganese deposits of the Glade Mountain district, Virginia , by R.L. Miller, 150 p., 19 pls., 21 figs., 6 tables, 1944.	Out of Print
62	Industrial limestones and dolomites in Virginia: New River-Roanoke River district , by B.N. Cooper, 98 p., 12 pls., 15 figs., 39 geologic sections, 2 tables, 1944.	Out of Print
63	Geology and ground-water resources of the Coastal Plain in southeastern Virginia , by D.J. Cederstrom, 384 p., 38 pls., 31 figs.,	

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

50 tables, 1945.	Out of Print
64 Commercial granites and other crystalline rocks of Virginia, by Edward Steidtmann, 152 p., 10 pls., 23 figs, 28 tables, 1945.	Out of Print
65 Industrial limestones and dolomites in Virginia: Northern and central parts of Shenandoah Valley, by R.S. Edmundson, 195 p., 19 pls., 5 figs., 21 tables.,1945.	Out of Print
66 Industrial limestones and dolomites in Virginia: Clinch Valley district, by B.N. Cooper, 259 p., 24 pls., 18 figs., 5 tables, 1945.	Out of Print
67 An Upper Eocene foraminiferal fauna from deep wells in York County, Virginia, by J.A. Cushman and D.J. Cederstrom, 58 p., 6 pls., 1945.	Out of Print
68 Chemical character of ground water in the Coastal Plain of Virginia, by D.J. Cederstrom, 62 p., 10 figs., 6 tables, 1946.	Out of Print
69 Public and industrial ground-water supplies of the Roanoke-Salem district, Virginia, by B.F. Latta, 53 p., 6 pls., 3 figs., 5 tables, 1956.	\$4.00
70 Sulfide mineralization in the Shenandoah Valley of Virginia, by Paul Herbert, Jr. and R.S. Young, 58 p., 15 pls., 10 figs., 3 tables, 1956.	\$4.00
71 Geology and oil resources of the Rose Hill district - the Fenster area of the Cumberland overthrust block - Lee County, Virginia, by R.L. Miller and J.O. Fuller, 383 p., 50 pls., 17 figs., 17 tables, 11 geologic sections, 1954.	Out of Print
72 Geology and mineral resources of the Gossan Lead district and adjacent areas in Virginia, by A.J. Stose and G.W. Stose, 233 p., 61 pls., 51 figs., 16 geologic sections, 1957.	\$4.00
73 Industrial limestones and dolomites in Virginia: James River district west of the Blue Ridge, by R.S. Edmundson, 137 p., 7 pls., 1 fig., 8 tables, 1958.	\$4.00
74 Geology and mineral resources of the Lynchburg quadrangle, Virginia, by W.R. Brown, 99 p., 14 pls., 6 figs., 9 tables, 1958.	\$4.00
75 Geology and ground-water resources of Pittsylvania and Halifax counties, by H.E. LeGrand, 86 p., 1 pl., 6 figs., 11 tables, 1960.	\$4.00
76 Geology and mineral resources of Rockingham County, by W.B. Brent, 174 p., 2 maps, 1960.	Out of Print
77 Geology and mineral resources of Albemarle County, by W.A. Nelson, 92 p., 1 map in color, 24 figs., 1 table, 1962.	Out of Print
78 Geology and mineral resources of Greene and Madison counties, by R.M. Allen, Jr., 102 p., 1 map in color, 35 figs., 7 tables, 1963.	\$4.00
79 Geology and mineral resources of Fluvanna County, by J.W. Smith, R.C. Milici, and S.S. Greenburg, 62 p., 3 pls., 1 map in color, 18 figs., 3 tables, 1964.	\$4.00
80 Geology and mineral resources of Frederick County, by Charles Butts and R.S. Edmundson, 142 p., 2 pls., 1 map in color, 27 figs., 6 tables, 1966.	\$4.00
81 Geology and mineral resources of Page County, by R.M. Allen, Jr., 78 p., 1 map in color, 18 figs., 1 table, 1967.	\$4.00
82 Post-Miocene stratigraphy and morphology, southeastern Virginia, by R.Q. Oaks, Jr. and N.K. Coch, 135 p., 2 maps, 33 figs., 6 tables, 1973	\$4.00
83 Geologic studies, Coastal Plain of Virginia, 153 p., 26 pls., 11 figs., 3 tables, 1973. Part 1. Stratigraphic units of the Lower Cretaceous through Miocene series by R.H. Teifke. Part 2. Paleogeology of Early Cretaceous through Miocene time by R.H. Teifke. Part 3. Pleistocene-Holocene environmental geology by Emil Onuschk, Jr.	\$4.00
84 Stratigraphy and coal beds of Upper Mississippian and Lower Pennsylvanian rocks in southwestern Virginia, by M.S. Miller, 211 p., 7 pls., 59 figs., 2 tables, 1974.	\$4.00
85 Descriptions of Virginia caves, by J.R. Holsinger, 450 p., 7 pls., 155 figs., 2 tables, 1975.	Out of Print
86 Geology of the Shenandoah National Park, Virginia, by T.M. Gathright, II, 93 p., 3 maps in color, 49 figs., 1976. (Reprint 2003)	\$16.00

Series discontinued

MINERAL RESOURCES REPORTS

1 Sources of aggregate used in Virginia highway construction, by E.O. Gooch, R.S. Wood, and W.T. Parrott, 65 p., 1960.	\$4.00
2 Analyses of clay, shale, and related materials - northern counties, by J.L. Calver, H.P. Hamlin, and R.S. Wood, 194 p., 1961.	\$4.00
3 Mica and feldspar deposits of Virginia, by W.R. Brown, 195 p., 24 pls., 17 figs., 9 tables, 1962.	\$4.00
4 Wells drilled for oil and gas in Virginia prior to 1962, by D.C. Le Van, 47 p., 3 pls., 1962.	\$4.00
5 Analyses of clay, shale, and related materials - west-central counties, by J.L. Calver, C.E. Smith, and D.C. Le Van, 230 p., 3 figs., 1964.	\$4.00
6 Analyses of clay, shale, and related materials - southwestern counties, by S.S. Johnson, M.V. Denny, and D.C. Le Van, 186 p., 11 figs, 1966.	\$4.00
7 Base- and precious-metal and related ore deposits of Virginia, by G.W. Luttrell, 167 p., 1 pl., 1 table, 1966.	Out of Print
8 Analyses of clay and related materials - eastern counties, by S.S. Johnson and M.E. Tyrell, 232 p., 9 figs., 1967.	\$4.00
9 Ground-water resources of Accomack and Northampton counties, Virginia, by Allen Sinnott and G.C. Tibbitts, Jr., 113 p., 4 pls., 7 figs., 8 tables, 1968.	\$4.00
10 Development of ground-water supplies in Shenandoah National Park, Virginia, by R.H. DeKay, 158 p., 31 pls., 2 tables, 1972.	\$4.00
11 High-silica resources of Clarke, Frederick, Page, Rockingham, Shenandoah, and Warren counties, Virginia, by W.B. Harris, 42 p., 17 figs., 11 tables, 1972.	\$4.00
12 Analyses of clay, shale, and related materials - southern counties, by P.C. Sweet, 183 p., 1 map, 1973.	\$4.00
13 Clay-material resources in Virginia, by P.C. Sweet, 56 p., 1 map, 1976.	\$4.00

Series discontinued

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

REPORTS OF INVESTIGATIONS

1	Geology of the Lexington quadrangle, Virginia, by K.F. Bick, 40 p., map in color, 1960.	\$4.00
2	Geology of the Williamsville quadrangle, Virginia, by K.F. Bick, 40 p., map in color, 1962.	\$4.00
3	Geology of Luray Caverns, Virginia, by J.T. Hack and L.H. Durlow, Jr., 43 p., 1 pl., 14 figs., 1962. (Revised 1977).	Out of Print
4	A magnetic survey of the Coastal Plain in Virginia, by D.C. Le Van and R.F. Pharr, 17 p., 3 pls., 2 figs., 1963.	\$4.00
5	Geology of the Clinchport quadrangle, Virginia, by W.B. Brent, 47 p., map in color, 14 figs., 2 tables, 1963.	\$4.00
6	Triassic formations of the Danville basin, by C.T. Meyertons, 65 p., 1 pl., 18 figs., 13 tables, 1963.	\$4.00
7	Geology of the Vesuvius quadrangle, Virginia, by H.J. Werner, 53 p., map in color, 35 figs., 2 tables, 1966.	\$4.00
8	Geology of the Millboro quadrangle, Virginia, by S.J. Kozak, 19 p., map in color, 1 table, 1965.	\$4.00
9	Miocene and Pleistocene Foraminifera and Ostracoda of southeastern Virginia, by J.D. McLean, Jr., 202 p., 23 fossil plates, 7 figs., 6 tables, 1966.	\$4.00
10	Geology of the Dillwyn quadrangle, Virginia, by W.R. Brown, 77 p., map in color, 29 figs., 1 table, 1969.	\$4.00
11	Geology of the Leesburg quadrangle, Virginia, by E.C. Toewe, 52 p., map in color, 14 figs., 6 tables, 1966.	\$4.00
12	Geology of Staunton, Churchville, Greenville, and Stuarts Draft quadrangles, Virginia, by E.K. Rader, 43 p., 4 maps in color, 14 figs., 4 tables, 1967.	Out of Print
13	Geology of the Natural Bridge, Sugarloaf Mountain, Buchanan, and Arnold Valley quadrangles, Virginia, by E.W. Spencer, 55 p., 4 maps in color, 33 figs., 2 tables, 1968.	\$4.00
14	Geologic investigation of the Lincoln and Bluemont quadrangles, Virginia, by P.E. Parker, 23 p., geologic map, 14 figs., 1968.	\$4.00
15	Geology of the Buckingham quadrangle, Virginia, by E.H. Ern, 45 p., map in color, 23 figs., 1 table, 1968.	\$4.00
16	Geology of the Martinsville West quadrangle, Virginia, by J.S. Conley and E.C. Toewe, 44 p., map in color, 14 figs., 1 table, 1968.	\$4.00
17	Geology of the Bennis Church, Smithfield, Windsor, and Chuckatuck quadrangles, Virginia, by N.K. Coch, 39 p., 4 maps in color, 15 figs., 1 table, 1968.	\$4.00
18	Geology of the Williamsburg, Hog Island, and Bacons Castle quadrangles, Virginia, by K.F. Bick and N.K. Coch, 28 p., 3 maps in color, 3 figs., 2 tables, 1969.	\$4.00
19	Geology of the Stokesville and Parnassus quadrangles, Virginia, by E.K. Rader, 30 p., 2 maps in color, 7 figs., 2 tables, 1969.	\$4.00
20	Magnetic and gravity surveys of Albemarle and Fluvanna counties, Virginia, by S.S. Johnson and P.C. Sweet, 10 p., 2 maps in color, 3 figs., 1969.	\$4.00
21	Geology of the Elliott Knob, Deerfield, Craigsville, and Augusta Springs quadrangles, Virginia, by S.J. Kozak, 23 p., 4 maps in color, 1 fig., 2 tables, 1970.	\$4.00
22	Geology of the Philpott Reservoir quadrangle, Virginia, by J.F. Conley and W.S. Henika, 46 p., 2 maps (1 in color), 18 figs., 1970.	\$4.00
23	Geology of the Hylas and Midlothian quadrangles, Virginia, by B.K. Goodwin, 51 p., 2 maps in color, 15 figs., 3 tables, 1970.	\$4.00
24	Geology of the Eagle Rock, Strom, Oriskany, and Salisbury quadrangles, Virginia, by O.S. McGuire, 39 p., 4 maps in color, 5 figs., 2 tables, 1970.	\$4.00
25	Geology of the Bristol and Wallace quadrangles, Virginia, by C.S. Bartlett, Jr. and H.W. Webb, 93 p., map in color, 22 figs., 3 tables, 1971.	\$4.00
26	Geology of the Bassett quadrangle, Virginia, by W.S. Henika, 43 p., map in color, 12 figs., 8 tables, 1971.	\$4.00
27	Bouguer gravity in Virginia, 36°30' to 39°30' N., 78°00' to 79°00' W., by S.S. Johnson, 40 p., 3 maps in color, 2 figs., 1971.	\$4.00
28	Geology of Newport News South and Bowers Hill quadrangles, Virginia, by N.K. Coch, 26 p., 2 maps in color, 7 figs., 1 table, 1971.	\$4.00
29	Bouguer gravity in Virginia, 36°30' to 38°52'30" N., 79°00' to 80°00' W., by S.S. Johnson, 38 p., 2 maps in color, 3 figs., 1972.	\$4.00
30	Geology of the Yorktown, Poquoson West, and Poquoson East quadrangles, Virginia, by G.H. Johnson, 57 p., 3 maps in color, 16 figs., 2 tables, 1972.	\$4.00
31	Geochemical reconnaissance for zinc, lead, and copper in the Staunton quadrangle, Virginia, by R.S. Good and G.C. Allen, 47 p., 25 figs., 7 tables, 1972.	\$4.00
32	Bouguer gravity, northeastern Virginia and the Eastern Shore peninsula, by S.S. Johnson, 48 p., 2 maps (1 in color), 2 figs., 1973.	\$4.00
33	Geology of the Snow Creek, Martinsville East, Price, and Spray quadrangles, Virginia, by J.F. Conley and W.S. Henika, 71 p., 5 maps (3 in color), 30 figs., 1 table, 1973.	\$4.00
34	Geology of the Berryville, Stephenson, and Boyce quadrangles, Virginia, by R.S. Edmundson and W.E. Nunan, 112 p., 3 maps in color, 21 figs., 1 table, 1973.	\$4.00
35	Geology of the Woodstock, Wolf Gap, Conicville, and Edinburg quadrangles, Virginia, by R.S. Young and E.K. Rader, 69 p., 4 maps in color, 14 figs., 1 table, 1974.	\$4.00
36	Geology of the Ashby Gap quadrangle, Virginia, by T.M. Gathright, II and P.G. Nystrom, Jr., 55 p., map in color, 22 figs., 4 tables, 1974.	\$4.00
37	Geology of the Salem quadrangle, Virginia, by R.V. Amato, 40 p., map in color, 3 figs., 2 tables, 1974.	\$4.00
38	Geology of the Studley, Yellow Tavern, Richmond, and Seven Pines quadrangles, Virginia, by P.A. Daniels, Jr. and Emil Onuschak, Jr., 75 p., 13 maps (4 in color), 25 figs., 5 tables, 1974.	\$4.00
39	Bouguer gravity in southeastern Virginia, by S.S. Johnson, 42 p., 2 maps (1 in color), 1 fig., 1 table, 1975.	\$4.00
40	Geology of the Front Royal quadrangle, Virginia, by E.K. Rader and T.H. Biggs, with a section on Hydrogeology by R.H. DeKay, 91 p., 2 maps in color, 21 figs., 7 tables, 1975.	Out of Print

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

- | | | |
|----|--|---------------|
| 41 | Geology of the Mulberry Island, Newport News North, and Hampton quadrangles, Virginia , by G.H. Johnson, 72 p., 3 maps in color, 24 figs., 4 tables, 1976. | \$4.00 |
| 42 | Geology of the Daleville quadrangle, Virginia , by O.S. McGuire, with a section on Economic Geology by J.M. Wunder and a Road Log, by E.K. Rader and J.M. Wunder, 43 p., map in color, 7 figs., 3 tables, 1976. | \$4.00 |
| 43 | Bouguer gravity in Virginia, 36°30' to 38°00' "N., 80°00' to 81°00' W. , by S.S. Johnson, 25 p., 2 maps (1 in color), 2 figs., 1976. | \$4.00 |
| 44 | Geology of the Linden and Flint Hill quadrangles, Virginia , by M.T. Lukert, III and E.B. Nuckols, II, with a section on Hydrogeology by R.H. DeKay, 83 p., 2 maps in color, 26 figs., 21 tables, 1976. | \$4.00 |
| 45 | Geology of the Strasburg and Toms Brook quadrangles, Virginia , by E.K. Rader and T.H. Biggs, with a section on Hydrogeology by R.H. DeKay, 104 p., 4 maps in color, 23 figs., 9 tables, 1976. | \$4.00 |

Series discontinued

INFORMATION CIRCULARS

- | | | |
|----|--|----------------|
| 1 | Catalog of oil and gas wells in well sample repository on August 1, 1959 , by D.C. Le Van, 11 p., 1959. | \$4.00 |
| 2 | Water-well data, western part of Albemarle County , by Whitman Cross, II, 16 p., 1960 | \$4.00 |
| 3 | Identification guide to common minerals and rocks of Virginia , by G.B. Baetcke, 51 p., 1961. | Out of Print |
| 4 | Directory of rock and mineral producers in Virginia , by D.C. Le Van and R.F. Pharr, 25 p., 1961. | Out of Print |
| 5 | Supplement to catalog of oil and gas wells - samples added to repository August 1, 1959 to January 1, 1962 , by D.C. Le Van, 5 p., 1962. | Out of Print |
| 6 | Guidebook to the Coastal Plain of Virginia, north of the James River , 46 p., 13 figs., 2 tables, 1962. | Out of Print |
| 7 | Guide to fossil collecting in Virginia , by E.K. Rader, 45 p., 15 pls., 1 map in color, 1 table, 1964. | Out of Print |
| 8 | Directory of the mineral industry in Virginia , by D.C. Le Van and R.F. Pharr, 32 p., 1964. | Out of Print |
| 9 | Geologic literature of the Coastal Plain of Virginia, 1783-1962 , by J.L. Ruhle, 95 p., 1965. | \$4.00 |
| 10 | Characteristics of the Everona Formation in Virginia , by Tinsley Mack, 16 p., 1 pl., 1965. | \$4.00 |
| 11 | Directory of the mineral industry in Virginia - 1966 , by D.C. Le Van and R.F. Pharr, 38 p., 1966. | Out of Print |
| 12 | Magnetic and radiometric data, southwest Piedmont of Virginia , 1 p., 4 pls., 1966. | \$4.00 |
| 13 | Directory of the mineral industry in Virginia - 1967 , by D.C. Le Van, 45 p., 1967. | Out of Print |
| 14 | Bibliography of Virginia geology and mineral resources - 1941-1949 , by B.F. Hoffer, 58 p., 1968. | \$4.00 |
| 15 | A computer-program system to grid and contour random data , by S.S. Johnson, C.L. Huxsaw, and D.R. Thomas, 38 p., 1 fig., 1971. | Out of Print |
| 16 | Field trip to the igneous rocks of Augusta, Rockingham, Highland, and Bath counties, Virginia , by R.W. Johnson, Charles Milton, and J.M. Dennison, 68 p., 1 map, 26 figs., 3 tables, 1971. | \$4.00 |
| 17 | Virginia gravity base net , by S.S. Johnson and R.E. Ziegler, 22 p., 1 fig., 1972. | \$4.00 |
| 18 | Bibliography of published measured sections west of the Blue Ridge in Virginia , by H.W. Webb, Jr. and W.E. Nunan, 219 p., 1 fig., 1972. | \$4.00 |
| 19 | Bibliography of Virginia geology and mineral resources - 1950-1959 , by B.F. Hoffer, 103 p., 1972. | \$4.00 |
| 20 | Geographic and cultural names in Virginia , by T.H. Biggs, 374 p., 1 pl., 1 fig., 2 tables, 1974. | \$11.00 |

Series discontinued

MINERAL RESOURCES CIRCULARS

- | | | |
|---|---|---------------|
| 1 | Iron in Virginia , by E.O. Gooch, 17 p., 1954. | \$4.00 |
| 2 | Summary of geology and ground-water resources of the Eastern Shore peninsula, Virginia: A preliminary report , by Allen Sinnott and G.C. Tibbitts, Jr., 18 p., 1954. | \$4.00 |
| 3 | Record of selected wells on the Eastern Shore peninsula, Virginia , by Allen Sinnott and G.C. Tibbitts, Jr., 39 p., 1955. | \$4.00 |
| 4 | Summary of geology and ground-water conditions in the Fredericksburg district, eastern Spotsylvania County, Virginia, A preliminary report , by Seymour Subitzky, 32 p., 1955. | \$4.00 |
| 5 | Titanium , by A.A. Pegau, 17 p., 1956. | \$4.00 |
| 6 | Subsurface correlations based on selected well logs from the Eastern Shore peninsula, Virginia , by Allen Sinnott and G.C. Tibbitts, Jr., 11 p., 1957. | \$4.00 |
| 7 | Virginia manganese minerals and ores, a selected bibliography with excerpts , by A.A. Pegau, 24 p., 1958. | Out of Print |

Series discontinued

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

STATE MAPS

Geologic Map of Virginia and Expanded Explanation , (1993), scale 1:500,000, 60 x 46 inches, text 80 pages,.	\$10.50
Generalized Geologic Map of Virginia , (2001), 11 x 17 inches.	Free

BROCHURES

Single copies of brochures are shipped at no charge, for multiple copies of any brochure the postage and handling charge is \$1.00. The brochures are available on the web at <http://www.mme.state.va.us/DMR/DOCS/MapPub/online.html>

Sinkholes , by D.A. Hubbard, Jr.	Caves and caving in Virginia , by D.A. Hubbard, Jr.
Oil and gas in Virginia , by R.C. Milici and M.L. Upchurch.	Gold in Virginia , by P.C. Sweet.
Mineral collecting in Virginia , by D.A. Penick.	Virginia diamonds , by P. C. Sweet.
Earthquakes , by M. S. Sibol, M. C. Chapman, and S. S. Johnson.	Coal and Virginia , by Roy Sites.

MISCELLANEOUS MAPS

*(**Shipping charges apply, please see page ii for details)*

**Lewis & Clark: A Legacy of Science - A map of Lewis & Clark's Track Across the Western Portion of North America	\$10.00
--	----------------

REPRINTS

Virginia coal resources - a long term view , by R.C. Milici and E.V.M. Campbell, 22 p., 10 figures, 8 tables, Reprint from Virginia Coal and Energy Journal, No. 3, (Summer 1991).	\$2.00
Restrictions to mining: their effect on available coal resources , by R.S. Sites, E.V.M. Campbell, K.K. Hostettler, N.K. Gardner, and S.J. Tewalt, 14 pages, 1992.	\$2.00
The long term outlook for coal production in Virginia , by R.C. Milici and E.V.M. Campbell, 5 pages, 1992.	\$2.00

VIRGINIA MINERALS

Issues of *Virginia Minerals* contain articles on mineral resources and industries, geologic studies, road log descriptions of geologic features, mineral and fossil characteristics, data related to mineral development, topographic mapping, and Division activities.
Past issues of *Virginia Minerals* may be purchased at a cost of \$1.00 each. Virginia Minerals can be downloaded for free on the web.

OPEN-FILE REPORTS

82-01	Culpeper Basin Vibroseis Survey , by Virginia Polytech. Inst. and State University Regional Geophysical Laboratory. Three topographic index maps; ozalid copies of shot points and geologic units and eight uninterpreted seismic profiles at 1 inch = 1,000 feet and 1 inch = 2,000 feet, 1982.	\$22.00
82-03	Blacksburg and Radford Area Vibroseis Surveys , by Virginia Polytech. Inst. and State University Regional Geophysical Laboratory. Two lines, seven ozalid copies of topographic index maps, shot points and four seismic profiles at 1 inch = 1,000 feet and 1 inch = 2,000 feet, 1982.	\$15.50
85-01	Summary reports for gas wells drilled in Buchanan County, Virginia (Scout tickets) , by J.J. Arnold, 251 p., 1985.	Out of Print
86-01	Assessment of Economic Heavy Minerals of the Virginia Inner Continental Shelf , by C.R. Berquist, Jr. and C.H. Hobbs, 17 p., 1986.	\$4.00
88-03	Mineral and energy resources of southwest Virginia , 41 p., 1980.	Out of Print
88-04	Study of economic heavy minerals of the Virginia Inner Continental Shelf , by C.R. Berquist, Jr. and C.H. Hobbs, II, 149 p., 1988.	Out of Print
89-01	Evaluation of Sediment Dynamics and the Mobility of Heavy Minerals on the Virginia Inner Continental Shelf , by J.D. Boon and C.R. Berquist, Jr., 29 p., 1989.	Out of Print
91-01	Preliminary Geologic Section Across the Buried Part of the Taylorsville Basin, Essex and Caroline Counties, Virginia , by R.C. Milici and others, 31 p., 6 figures, 4 tables, 9 plates, 1991.	\$11.75
92-02	Oil and Gas Well Analyses of Hydrocarbon Potential of Buchanan, Dickenson, and Wise Counties, Virginia , by F.H. Jacobeen, Jr., 17 pages, 3 figures, 5 tables, 26 plates, 1992.	\$11.00
04-02	Application of Geostatistical Methods in 3-D Modeling of Coal Resources, Buchanan County, Virginia , by A.K. Gilmer, R.J. Kent and B.D. Knight, color poster available digitally as pdf file	\$5.50
04-03	Central Shenandoah Valley Digital Geologic Compilation , by I.J. Duncan, E.V. Campbell, S.T. Williams, H.A. Hibbitts, and J.M. Floyd, CD-ROM containing digital files in ESRI shapefile format, metadata files and image, 2004.	Superseded by OFR 06-01

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

04-04	Kipps' Lime-magnesia, An Unconventional Agricultural Lime and a 48-year Perspective Within the Aglime Industry , by D.A. Hubbard, Jr. and Elmer C. Kipps, 21 p., 2004. Superseded by Virginia Minerals Vol. 50 No. 1	
05-01	Preliminary investigation of the Chimborazo Hill landslide of August 30, 2004 , by Mark W. Carter and C. R. Berquist, 13 p. 2005. Superseded by Virginia Minerals Vol. 48 No. 4	
05-02	Geologic Map of Columbia 7.5- minute Quadrangle, Virginia , by Christopher M. Bailey, G. Christopher Koteas, Jonathan A. Relyea, Ethan O. Weikel, John Dubose, and Matthew C. Goodman , folded 32 x 35-inch color 1:24,000-scale geologic map with explanation, 2005.	\$8.00
05-04	Mineral and Fossil Fuel Production in Virginia (1999-2003) , by Amy K. Gilmer, Catherine B. Enomoto, James A. Lovett, and David B. Spears, 77p., 2005.	\$8.00
05-05	Preliminary Surficial Geologic Map of the Grottoes Quadrangle, Virginia , by Hugh H. Mills, Elizabeth V. M. Campbell, Julie M. Floyd, Harry A. Hibbitts, and Scott T. Williams, CD-ROM containing digital files in ESRI shapefile format, metadata files and image, 2006	\$15.00
06-01	Interstate 81 Corridor Digital Geologic Compilation , by Elizabeth V. Campbell, Harry A. Hibbitts, Scott T. Williams, Ian J. Duncan, Julia S. Reis, Julie M. Floyd, and Gerald P. Wilkes, CD-ROM containing digital files in ESRI shapefile format, metadata files and image, 2006.	\$15.00
07-01	Tectonic history and characteristics of fracture systems affecting coal mine roof stability in Southwest Virginia , by C. B. Byington, 40 p. 2007.	\$6.00
07-02	Guidelines for geologic mapping projects , by M. J. Heller, C. R. Berquist, E. V. Campbell, M. W. Carter, W. W. Whitlock, G. P. Wilkes, and S. T. Williams, 28 p. 2007.	\$4.00

BOOKS

*(**Shipping charges apply, please see page ii for details)*

Minerals of Virginia - 1990 , by R.V. Dietrich, 474 p., with illustrations, 1990.	\$ 12.75
Minerals of Virginia, 1990 - an update , by R.V. Dietrich, 28 p., 4 figs., 1993.	Out of Print
Geology and Virginia , by R.V. Dietrich, 213 p., 1990 (2nd printing).	\$13.75
Stones: Their collection, identification, and uses , by R. V. Dietrich, 191 pages, 1989.	Out of Print
** Roadside Geology of Virginia , by Keith Frye, Mountain Press Publishing Company, 278 p., 1986.	\$17.00
**Guidebook to the Natural Bridge and Natural Bridge Caverns , by E.W. Spencer, 48 p., 1985.	\$4.00
** Natural Tunnels, Nature's Marvel in Stone , by Tony Scales, The Overmountain Press, 150 p., 2004.	\$19.95
**Groundwater Resources of Rockbridge County, Virginia, A first assessment of our county's underground water supply , by Frits van der Leeden, Tennyson Press, 95 p., 2004.	\$22.00

EDUCATIONAL CD-ROMS

Geology of Virginia, CD-ROM 1, second edition, Introduction and geologic background , by P. S. Sethi, R. C. Whisonant, Karen K. Cecil, and Phyllis L. Newbill, 2001.	\$6.00
Teacher's guide for geology of Virginia CD-ROM 1, second edition , by Karen K. Cecil, P. S. Sethi R. C. Whisonant, and Phyllis L. Newbill, 132 pages, looseleaf, 2001	\$13.00
Geology of Virginia, CD-ROM 2, Coastal Plain , by P. S. Sethi, R. C. Whisonant, Karen K. Cecil, and Phyllis L. Newbill, 2000 (Reprinted 2005).	\$6.00
Teacher's guide for geology of Virginia CD-ROM 2 , by Karen K.Cecil, R. C. Whisonant, and P. S. Sethi, and Phyllis L. Newbill, 49 pages, looseleaf, 2000 (Reprinted on a CD-ROM 2005).	\$6.00
Geology of Virginia, CD-ROM 3 Piedmont and Blue Ridge , by P. S. Sethi, R. C. Whisonant, Karen K. Cecil, and Phyllis L. Newbill, 2000	\$6.00
Teacher's guide for geology of Virginia CD-ROM 3 , by Karen K.Cecil, R. C. Whisonant, and P. S. Sethi, and Phyllis L. Newbill, 187 pages, looseleaf, 2000.	\$13.00
Geology of Virginia, CD-ROM 4 Valley and Ridge and Appalachian Plateaus , by P. S. Sethi, R. C. Whisonant, Karen K. Cecil, Phyllis L. Newbill, and Lora L. Combs, 2001 (Reprint 2005).	\$6.00
Teacher's guide for geology of Virginia CD-ROM 4 , by Karen K.Cecil, R. C. Whisonant, and P. S. Sethi, Phyllis L. Newbill, and Lora L. Combs, 176 pages, looseleaf, 2001.	\$13.00.
Images of Virginia's geology , CD-ROM, by Phyllis L. Newbill, R. C. Whisonant, and P. S. Sethi, 2003.	Out of Print

ROCK AND MINERAL SET

*(**Shipping charges apply, please see page ii for details)*

****Boxed set of twenty rocks and minerals from Virginia.**

\$9.00

U.S. GEOLOGICAL SURVEY REPORTS AND MAPS

*(**Shipping charges apply, please see page ii for details)*

U. S. G. S. GEOLOGIC QUADRANGLE MAPS (GQs)

\$7.00 EACH

**Amonate	(GQ 1597)	**Duty	(GQ 1458)	**Manassas	(GQ 1732)	**Vienna	(GQ 1670)
**Anawalt	(GQ 1668)	**Elkhorn City	(GQ 951)	**Middletown	(GQ 1803)	**Whitesburg	(GQ 1119)
**Annandale	(GQ 1601)	**Fairfax	(GQ 1600)	**Purcellville	(GQ 1755)		
**Big A Mountain	(GQ 1350)	**Falls Church	(GQ 1734)	**Quantico	(GQ 1044)		
**Big Stone Gap	(GQ 424)	**Honaker	(GQ 1542)	**Seneca	(GQ 1802)		
**Bluemont	(GQ 1739)	**Jewell Ridge	(GQ 1550)	**Stickleville	(GQ 238)		
**Bramwell	(GQ 745)	**Keokee	(GQ 851)	**Supply	(GQ 1769)		

CHARTS

****OC-123. Interpretive seismic profile along Interstate I-64 from the Valley and Ridge to the Coastal Plain in central Virginia,**
by L.D. Harris, W. deWitt, Jr., and K.C. Bayer, 1982.

\$2.50

MISCELLANEOUS INVESTIGATIONS

****Map I-2033 Geologic Map and Generalized Cross Sections of the Coastal Plain and Adjacent parts of the Piedmont Virginia,** by R.B. Mixon, C.R. Berquist, Jr., W.L. Newell, and G.H. Johnson, 2 map sheets, color 1:250,000 geologic map and cross section, 1989

\$7.75

GEOPHYSICAL MAPS

GRAVITY

State map of Virginia, Gravity map of the simple Bouguer anomaly (1977), by S.S. Johnson. Gravity values which are useful for interpreting rock type and structure, are indicated by 5 milligal contours. Color edition; scale 1:500,000 or 1 inch = approximately 8 miles; size 30 x 60 inches.

\$6.00

AEROMAGNETIC

*(**Shipping charges apply, please see page ii for details)*

STATE MAP (SCALE 1:1,000,000 AND 1:500,000)

****Aeromagnetic map of Virginia (1977),** by I. Zietz and others. Magnetic values which are useful for interpreting rock type and structure, are indicated by 100 gamma interval contours. Color edition; scale 1 inch = approximately 16 miles; size 10 x 32 inches. Prepared by U.S. Geological Survey in cooperation with Division of Mineral Resources. The 1:500,000 map is not in color.

\$5.00

REGIONAL MAPS (SCALE 1:250,000)

****See Figure 1, Composite Aeromagnetic Maps for locations.** These maps were made from 1:62,500 aeromagnetic maps listed under "quadrangle maps" below.

\$5.00 Each

SOUTHWEST VIRGINIA MAP (1962) No book, just ozalid

****Aeromagnetic data for the area marked as H in Figure 1 are available in another form.** The data packet consists of ozalid copies of: a. total magnetic intensity maps (5 sheets, scale 1:100,000); b. geophysical interpretation maps (5 sheets, scale 1:100,000); c. composite maps of items "a" and "b" (2 sheets, scale 1:250,000); and d. a 36-page booklet of data interpretation.

\$41.00

QUADRANGLE MAPS (15-MINUTE, SCALE 1:62,500)

****Aeromagnetic maps are available for the quadrangles listed below.** Where less than full quadrangle coverage is available, compass directions indicate quadrants covered.

\$5.00 Each

1. Back Bay, 2. Moyock, 3. Lake Drummond, 4. Suffolk, 5. Holland, 6. Boykins, 7. Arringdale, 8. Emporia, 9. White Plains, 10. South Hill, 11. Boydton, 12. Clarksville, 16. Draper, 17. Martinsville NE, NW, SE, 33. Virginia Beach, 34. Cape Henry, 35. Newport News, 36. Smithfield, 37. Ivor, 38. Homeville, 39. Jarratt, 40. McKenney, 41. Lawrenceville, 42. Kenbridge, 43. Chase City, 44. Clover, 45. Halifax, 46. Riceville, 47. Chatham, 48. Callands, 49. Rocky Mount, 50. Endicott NE, NW, SE, 52. Macks Mtn. NE, NW, 53. Max Meadows NE, NW, 63. Cape Charles, 64. Elliotts Creek, 65. Hampton, 66. Yorktown, 67. Surry, 68. Disputant, 69. Petersburg, 70. Dinwiddie, 71. Wellville, 72. Crewe, 73. Keysville, 74. Charlotte Court House, 75. Brookneal, 76. Gladys, 77. Altavista, 78. Moneta, 79. Boones Mill, 80. Elliston, 81. Blacksburg, 82. Radford, 83. Pulaski, 84. Bland NE, NW, SE, 92. Broadwater, 93. Eastville, 94. Westcott, 95. Mathews, 96. Williamsburg, 97. Toano, 98. Charles City, 99. Bermuda Hundred, 100.

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources


Figure 1

COMPOSITE AEROMAGNETIC MAPS

(Scale 1:250,000)

Diazo copies

Mylar-copy prices available on request.

 U.S. Geological Survey data (not available from Division of Mineral Resources)

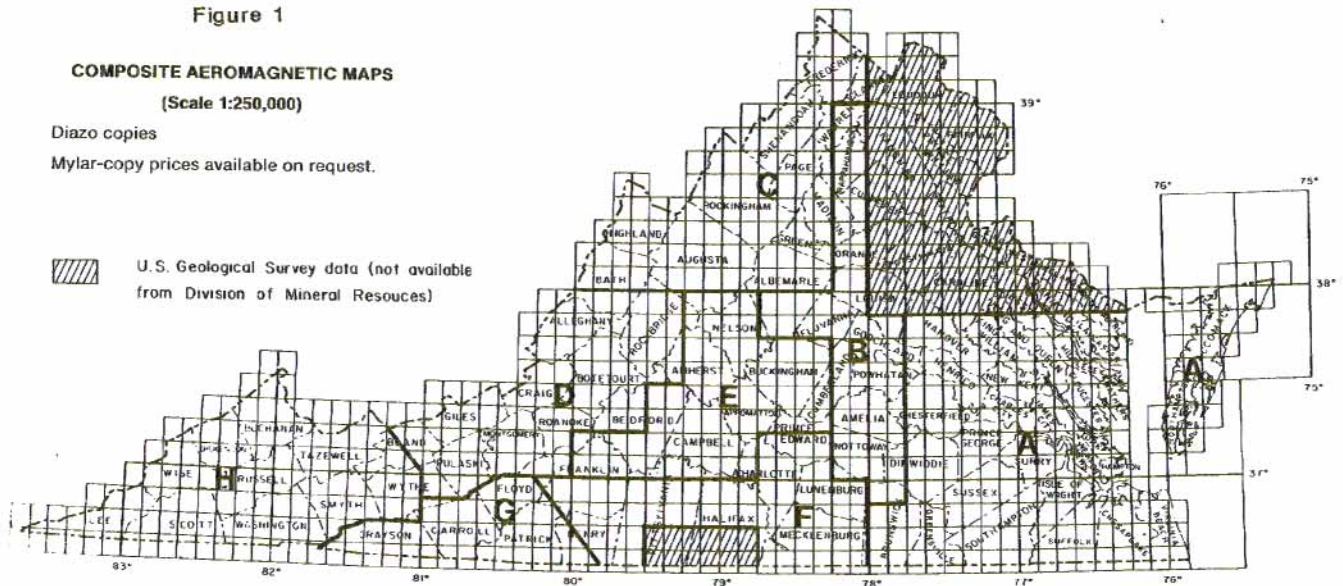
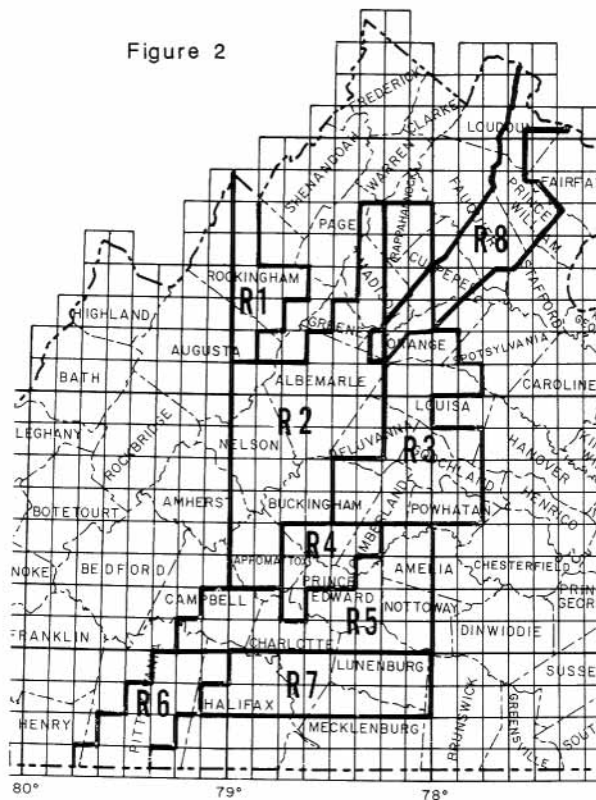


Figure 2



COMPOSITE AERORADIOMETRIC MAP

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

Winterpock, 101. Skinquarter, 102. Jetersville, 103. Farmville, 104. Pamplin City, 105. Appomattox, 106. Lynchburg, 107. Goode, 108. Peaks of Otter, 109. Roanoke, 110. Salem, 111. Waiteville, 112. Pearisburg, 113. Narrows, 114. Bluefield, 120. Accomac, 121. Onacock, 122. Kilmarnock, 123. Urbanna, 124. New Kent, 125. King William, 126. Richmond, 127. Midlothian, 128. Powhatan, 129. Lakeside Village, 130. Dillwyn, 131. Buckingham, 132. Shipman, 133. Amherst, 134. Buena Vista, 135. Natural Bridge, 136. Eagle Rock, 137. New Castle, 138. Ronceverte, 141. Chincoteague Island, 142. Hallwood, 143. Crisfield, 144. Ewell, 145. Heathsville SW, SE, 146. Morattico SW, SE, 147. Tappahannock SW, SE, 148. Aylett SW, SE, 150. Beaverdam SW, SE, 151. Fredericks Hall SW, SE, 152. Columbia, 153. Scottsville, 154. Covesville, 155. Lovingson, 156. Vesuvius, 157. Lexington, 158. Millboro, 159. Clifton Forge, 160. Callaghan, 172. Gordonsville, 173. Charlottesville, 174. University, 175. Waynesboro, 176. Staunton, 177. Craigsville, 178. Williamsville, 179. Warm Springs, 185. Rapidan, 186. Madison, 187. Elkton, 188. Harrisonburg, 189. Parnassus, 190. McDowell, 191. Monterey, 192. Cass, 197. Sperryville, 198. Stony Man, 199. Mt. Jackson, 200. Broadway NW, SW, 201. Fort Seybert, 203. Spruce Knob, 208. Front Royal, 209. Strasburg, 210. Edinburg, 211. Orkney Springs, 212. Petersburg, 217. Winchester, 218. Middletown, 219. Wardensville, 223. Gardarstown, 224. Capon Bridge.

AERORADIOMETRIC

*(**Shipping charges apply, please see page ii for details)*

REGIONAL MAPS (SCALE 1:250,000)

******See Figure 2, Composite Aeroradiometric Maps, for locations. These maps were made from the 1:62,500 aeroradiometric maps listed under "Quadrangle maps" below. **\$5.00 Each**

QUADRANGLE MAPS (15-MINUTE, SCALE 1:62,500)

******Aeroradiometric maps are available for the quadrangles listed below. Where less than full quadrangle coverage is available, compass directions indicate quadrants covered. **\$5.00 Each**
15. Danville NE, NW, SW, 16. Draper NE, SW, SE, 42. Kenbridge, 43. Chase City, 44. Clover, 45. Halifax, 46. Riceville, 47. Chatham NE, SW, SE, 72. Crewe, 73. Keysville, 74. Charlotte Court House, 75. Brookneal, 76. Gladys NE, SW, SE, 102. Jetersville, 103. Farmville, 104. Pamplin City, 105. Appomattox, 128. Powhatan, 129. Lakeside Village, 130. Dillwyn, 131. Buckingham, 132. Shipman, 151. Fredericks Hall SW, SE, 152. Columbia, 153. Scottsville, 154. Covesville, 155. Lovingson, 171. Glenora NW, SW, SE, 172. Gordonsville, 173. Charlottesville, 174. University NE, SW, SE, 175. Waynesboro NW, SW, SE, 184. Culpeper NE, NW, SW, 185. Rapidan, 186. Madison NE, SW, SE, 187. Elkton NW, 188. Harrisonburg, 195. Catlett, 196. Warrenton NE, SW, SE, 197. Sperryville, 198. Stony Man NE, SE, 200. Broadway NW, SW, 206. Middleburg, 211. Orkney Springs SW, 215. Leesburg NE, SE.

TOPOGRAPHIC MAPS AND PRODUCTS

*(**Shipping charges apply, please see page ii for details)*

BASE MAPS

****Middle Atlantic States, (1972).** Shows political boundaries, major rivers and roads, federal recreational areas, major cities and towns of Pa., N. J., Del., Md., W.Va., Va., and Ohio, size 19 x 28 inches. **\$7.00**

****State of Virginia, (1973).** Location of county boundaries, railroads, cities, towns, and streams, scale 1:1,000,000 or 1 inch = approximately 16 miles, size 16 x 32 inches. **\$7.00**

****State of Virginia, (1973).** Location of county and state boundaries, county seats, railroads, cities, and towns, all represented by black lines; rivers, many larger streams, and water features, all represented by blue lines, scale 1:500,000 or 1 inch = approximately 8 miles, size 30 x 64 inches. **\$7.00**

****State of Virginia, (1973).** Multicolor topographic edition depicting landforms with contours at 200-foot intervals; state and federal parks, forests, and some wildlife refuges; roads and railroads; urbanized areas; county and city boundaries and names; rivers and lakes; scale 1:500,000 or 1 inch = approximately 8 miles; size 30 x 64 inches. **\$7.00**

****State of Virginia, shaded relief, (1973).** Location of county boundaries and highways with contours. **\$7.00**

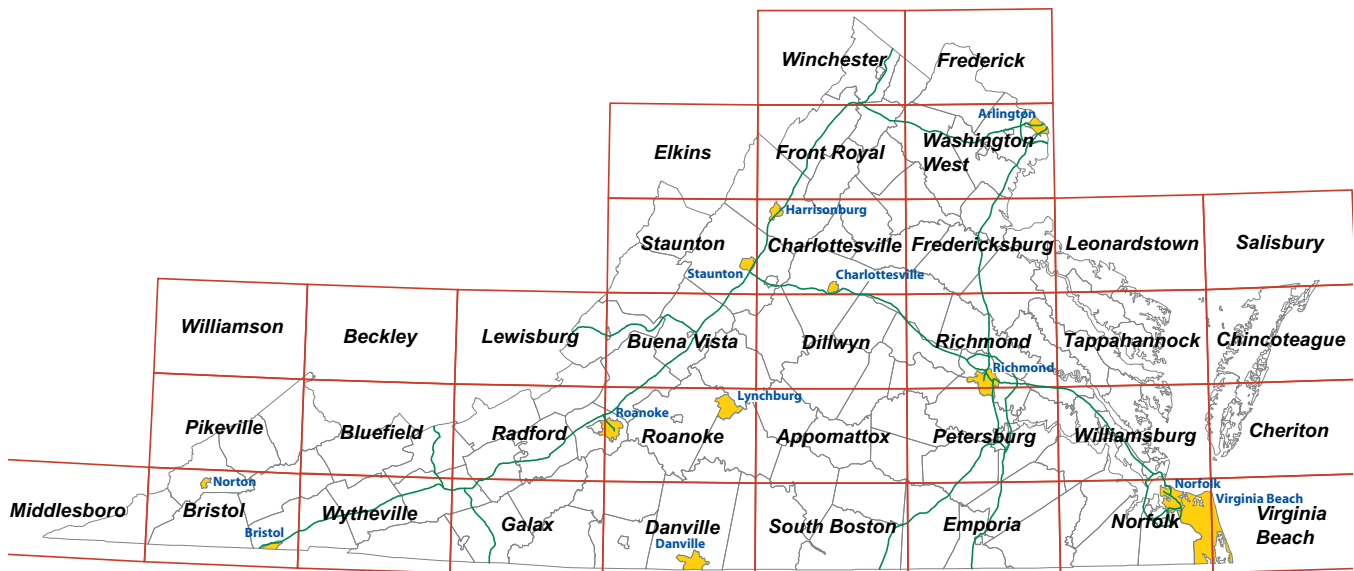
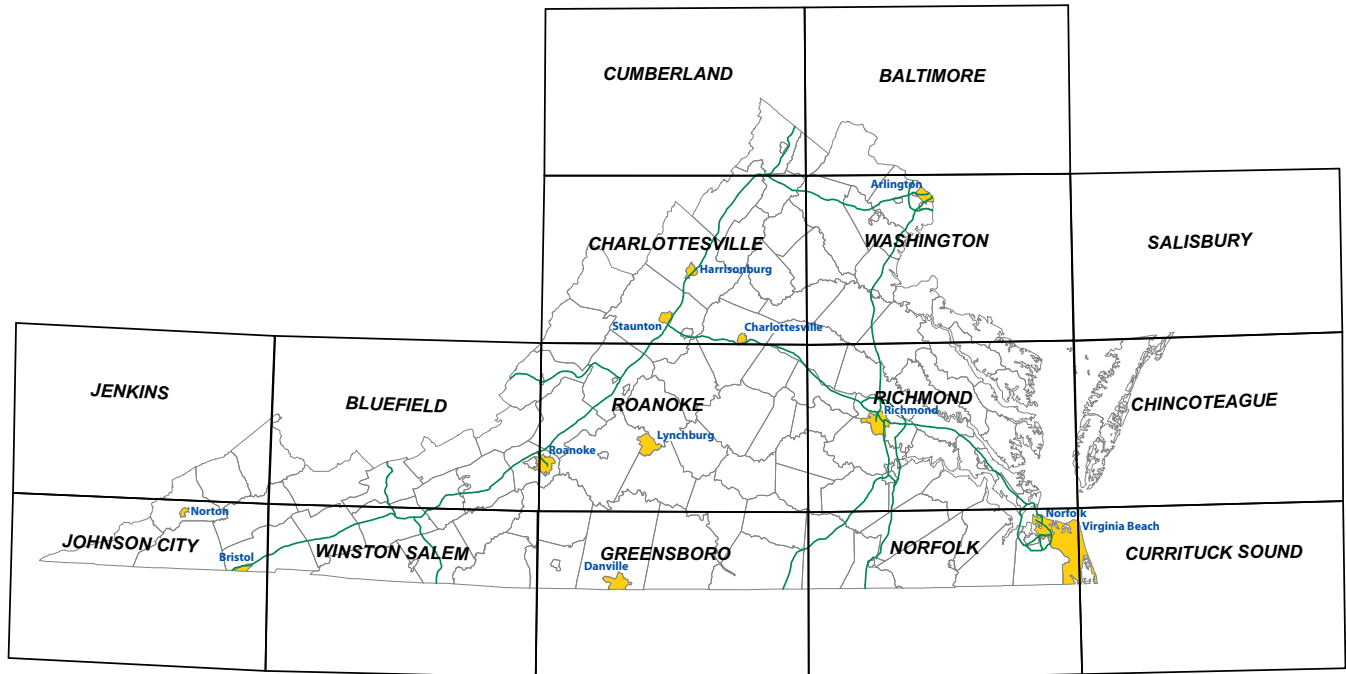
INTERNATIONAL SERIES

******Multicolored topographic maps in this series are prepared at a scale of 1:1,000,000 or 1 inch = approximately 16 miles, size 25 x 26 inches. Contour intervals (metric) are color enhanced. Virginia and adjacent states are depicted on 2 maps; west of 78°W longitude, **Blue Ridge sheet (out of stock); east of 78°W longitude, Chesapeake Bay sheet.** **\$7.00**

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

1:250,000-SCALE (1 X 2 DEGREE)TOPOGRAPHIC MAPS

******The Division stocks 1:250,000-scale topographic maps for all of Virginia. The 1 x 2 degree sheets are approximately 22 x 32 inches in size with 1 inch on the map = 4 miles on the ground. There is no discount for a “bulk order.” **\$7.00 Each**



1:100,000-SCALE TOPOGRAPHIC MAPS

******The Division stocks 1:100,000-scale topographic maps with woodland coverage for all of Virginia. The scale (and contour intervals) of the maps are based on the metric system with 1 centimeter on the map = 1 kilometer on the ground. Most maps are approximately 24 x 42 inches in size. There is no discount for a “bulk order.” **\$7.00 Each**

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

SHENANDOAH NATIONAL PARK

- **Multicolored topographic maps (1969). Printed in three parts: the Northern, Central, and Southern sections.** Green overprint; scale 1:62,500 or 1 inch = approximately 1 mile; contour interval 200 feet; size, each section 38 x 21 inches. **\$10.00 Each**

TOPOGRAPHIC BATHYMETRIC MAPS

- **Depicts beach and Atlantic Ocean bottom topography. Federal lease block grid indicated on ocean portion.**
- | | |
|---|---------------|
| Currituck Sound, Va.-N.C. (Virginia Beach to Kitty Hawk), scale 1:250,000. | \$7.00 |
| Chincoteague, Va., scale 1:250,000. | \$7.00 |
| Cheriton, Va., scale 1:100,000. | \$7.00 |

COUNTY TOPOGRAPHIC MAPS

- **County topographic maps at a scale of 1:50,000 are available for the following counties:**
Albemarle/City of Charlottesville, Amherst, Bedford, Bland, Buchanan, Campbell/City of Lynchburg, Charles City, Chesterfield, Culpeper, Fairfax, Hanover, Henrico, Henry, James City, Lee, Loudoun, New Kent, Orange, Prince William, Roanoke, Rockbridge, Smyth, Spotsylvania/City of Fredericksburg, Stafford, Tazewell, Warren, Washington/City of Bristol, Wythe. **\$7.00 Each**

1:24,000-SCALE (7.5-MINUTE) QUADRANGLES

- **The Division stocks 7.5-minute topographic maps with woodland coverage for all of Virginia. Scale 1:24,000 or 1 inch = 2000 feet; size 27 x 22 inches. Some of the maps have been photorevised to indicate, by means of purple color, revisions of and additions to cultural data. There is no discount for a "bulk order." An index to topographic maps of Virginia is free from the Division upon request. **\$6.00 Each****

ORTHOPHOTOQUADS

- **Rectified aerial photographic depictions of standard 7.5-minute quadrangles are available for some areas. Scaled measurements, differentiation of coniferous and deciduous trees, and interpretations of land use can be determined from orthophotoquads. Scale 1:24,000 or 1 inch = 2000 feet, size 27 x 22 inches. The orthophotoquads do not show contours. A listing of orthophotoquads is available. Ozalid copies only, allow 24 hours for reproduction. **\$6.00 Each****

AERIAL PHOTOGRAPHS

Contact the **U.S. Geological Survey, Earth Resources Observation Systems Data Center, Sioux Falls, SD 57198; telephone: 605-594-6151.**

ATLAS

- **Virginia Atlas and Gazetteer, 63 topographic maps, scale 1:150,000; includes information on historic sites, museums, campgrounds, canoe and boat trips, parks, and scenic drives. **\$20.00****

RAISED RELIEF MAPS

- **Topographic raised relief maps with boundaries, cities and towns, roads, railroads, and contours; woodland shown in green tint, scale 1:250,000. Charlottesville, Roanoke, Winston Salem, Bluefield, Greensboro, Jenkins, Johnson City, and Baltimore. **\$20.00****
- **Shenandoah National Park, scale 1:250,000. **\$10.00****
- **U.S. raised relief map. Full color with physical features and political boundaries. All states including Hawaii and Alaska; major cities shown. (1" = 100 miles). 34.5" x 21.5" **\$25.00****

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

3-D TOPOGRAPHIC MAPS

Charlottesville 30 x 60 minute quadrangle, scale: 1:100,000

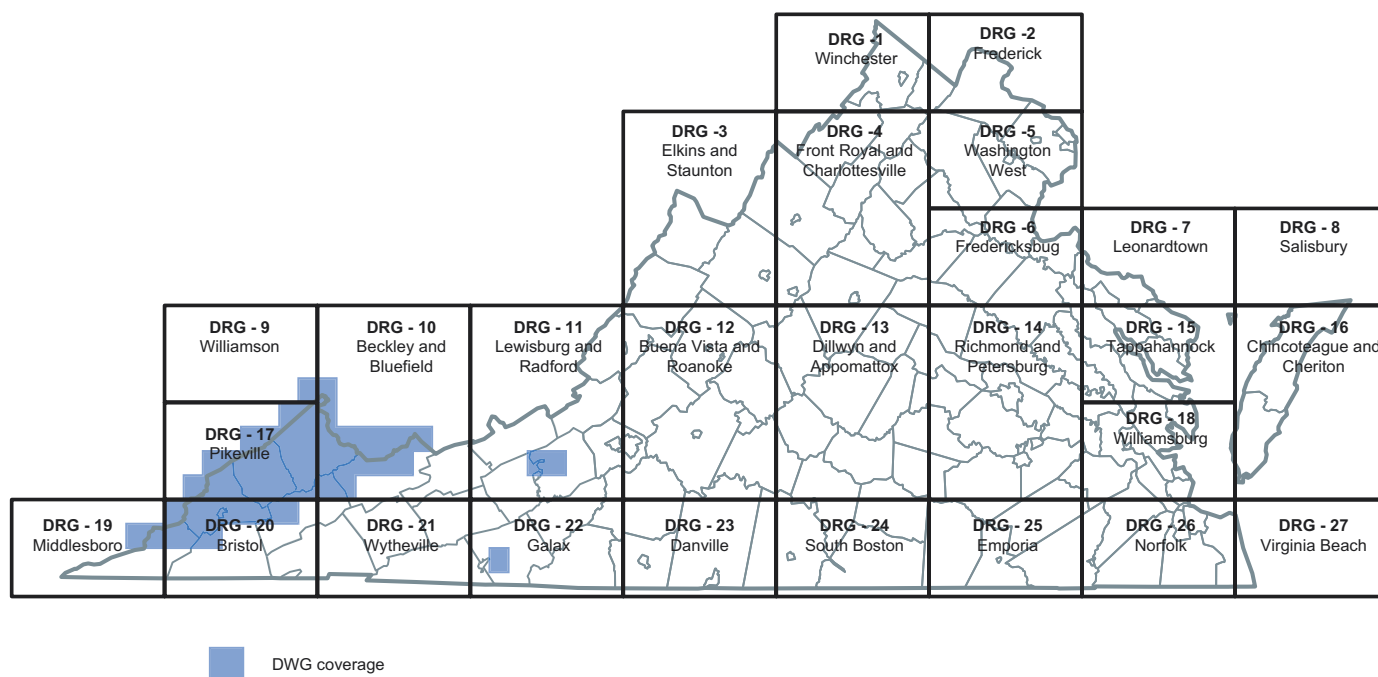
\$7.00

DIGITAL TOPOGRAPHIC DATA

Digital Raster Graphics (DRG) of 1:24,000; 1:100,000, and 1:250,000 scale topographic maps; refer to the diagram below for quadrangle designation. Viewing software included on CD is for Windows 3.x. For Windows 9x, Windows NT 4.0, Windows 2000, etc..., the USGS has a software viewer available for download from their website- <http://mcmweb.er.usgs.gov/drg>. Delivery: allow 5 working days from receipt of order for shipment of a single disc; allow 15 days from receipt of order for shipment of statewide coverage.

Order by number and name; Price: \$15.00 for each CD-ROM

DRG-1 Winchester	DRG-7 Leonardtown	DRG-14 Richmond and Petersburg	DRG-21 Wytheville
DRG-2 Frederick	DRG-8 Salisbury	DRG-15 Tappahannock	DRG-22 Galax
DRG-3 Elkins and Staunton	DRG-9 Williamson	DRG-16 Chincoteague and Cheriton	DRG-23 Danville
DRG-4 Front Royal and Charlottesville	DRG-10 Beckley and Bluefield	DRG-17 Pikeville	DRG-24 South Boston
DRG-5 Washington West	DRG-11 Lewisburg and Radford	DRG-18 Williamsburg	DRG-25 Emporia
DRG-6 Fredericksburg	DRG-12 Buena Vista and Roanoke	DRG-19 Middlesboro	DRG-26 Norfolk
	DRG-13 Dillwyn and Appomattox	DRG-20 Bristol	DRG-27 Virginia Beach



**VA Dept. of Mines, Minerals and Energy
Div. of Mineral Resources
7 March, 2003**

Digital Vector data of 47 1:24,000 scale topographic maps for the southwest Virginia coalfield and three additional 1:24,000 maps (Blacksburg, Radford North, and Woodlawn) available on one CD-ROM. File format: AutoCAD release 12 DWG. For information on specific data layers please contact the Environmental Engineer Consultant at the Division of Mined Land Reclamation (Telephone 276-523-8166).

Price: \$35.00



Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

INDEX TO GEOLOGIC QUADRANGLE MAPPING (1:24,000-1:62,500 SCALE)
IN SOUTHWESTERN VIRGINIA
(* Indicates Out of Print)

QUADRANGLE	SCALE	DATE	PUB
ABINGDON	1:24,000	1980	PUB 16
APPALACHIA	1:24,000	1988	PUB 72
BENHAM	1:24,000	1988	PUB 72
BRADSHAW	1:24,000	1989	PUB 99
BRISTOL	1:24,000	1971	RI 21
CANEY RIDGE	1:24,000	1988	PUB 84
CARBO	1:24,000	1991	PUB 106
CLINCHPORT	1:24,000	1963	RI 5
CLINTWOOD	1:24,000	1988	PUB 86
COEBURN	1:24,000	1988	PUB 81
COVE CREEK *	1:62,500	1944	BULL 60
DAMASCUS	1:24,000	2005	PUB 172
DUNGANNON	1:24,000	1988	PUB 81
EAST STONE GAP	1:24,000	1988	PUB 79
FLAT GAP	1:24,000	1988	PUB 71
FORT BLACKMORE	1:24,000	1988	PUB 80
GARDEN MOUNTAIN *	1:62,500	1944	BULL 60
GARY	1:24,000	1991	PUB 110
GRUNDY	1:24,000	1989	PUB 97
HARMAN	1:24,000	1989	PUB 98
HAYSI	1:24,000	1989	PUB 91
HOLSTON VALLEY	1:24,000	1980	PUB 16
HURLEY	1:24,000	1992	PUB 121
HUTCHINSON ROCK *	1:62,500	1944	BULL 60
JAMBOREE	1:24,000	1989	PUB 98
JENKINS EAST	1:24,000	1988	PUB 86

QUADRANGLE	SCALE	DATE	PUB
KEEN MOUNTAIN	1:24,000	1989	PUB 96
LAUREL BLOOMERY	1:24,000	2005	PUB 172
MAJESTIC	1:24,000	1992	PUB 121
NORA	1:24,000	1989	PUB 92
NORTON	1:24,000	1986	PUB 65
PANTHER	1:24,000	1992	PUB 121
PATTERSON	1:24,000	1989	PUB 99
POUND	1:24,000	1988	PUB 84
PRATER	1:24,000	1984	PUB 52
RICHLANDS	1:24,000	1991	PUB 109
SAINT PAUL	1:24,000	1991	PUB 106
SHADY VALLEY	1:24,000	1980	PUB 16
TAZEWELL NORTH	1:24,000	1991	PUB 110
TIPTOP	1:24,000	1991	PUB 110
TIPTOP *	1:62,500	1944	BULL 60
VANSANT	1:24,000	1984	PUB 52
WALLACE	1:24,000	1971	RI 25
WAR	1:24,000	1989	PUB 99
WHARNCLIFFE	1:24,000	1992	PUB 121
WISE	1:24,000	1988	PUB 80
WYNDALE	1:24,000	1980	PUB 16

* Indicates Out of Print



Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

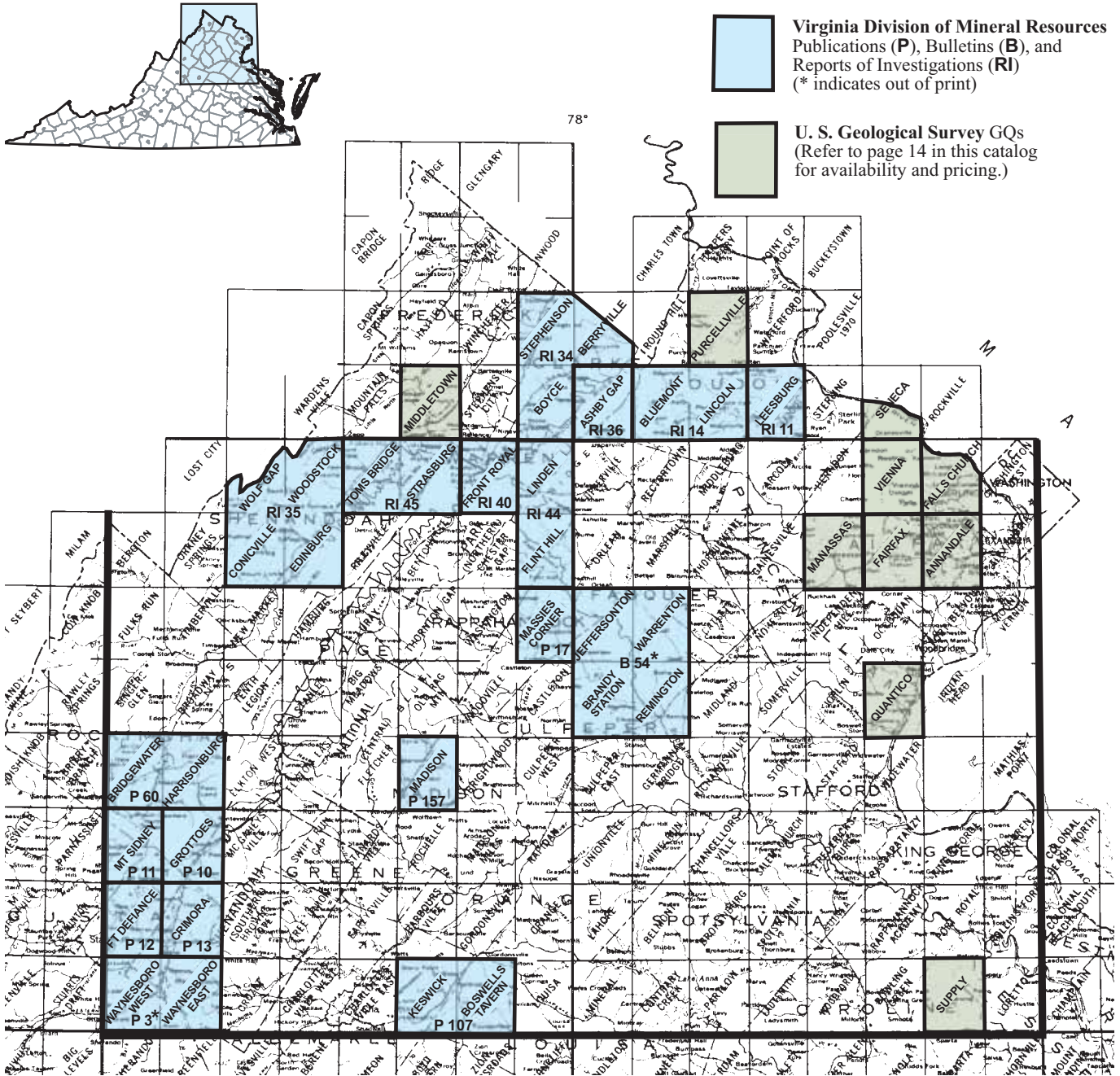
INDEX TO GEOLOGIC QUADRANGLE MAPPING (1:24,000-1:62,500 SCALE)
IN WESTERN VIRGINIA
(* Indicates Out of Print)

QUADRANGLE	SCALE	DATE	PUB
ARNOLD VALLEY	1:24,000	1968	RI 13
AUGUSTA SPRINGS	1:24,000	1970	RI 21
AXTON	1:24,000	1980	PUB 22
BASSETT	1:24,000	1971	RI 26
BATH ALUM	1:62,500	1962	RI 2
BIG LEVELS	1:62,500	1966	RI 7
BLACKSBURG*	1:24,000	1979	PUB 14
BLAIRS	1:24,000	1977	PUB 2
BROSVILLE	1:24,000	1980	PUB 21
BROWNSBURG	1:62,500	1960	RI 1
BUCHANAN	1:24,000	1968	RI 13
BUENA VISTA	1:24,000	2000	PUB 154
BURNSVILLE	1:62,500	1962	RI 2
CALLANDS	1:24,000	1988	PUB 77
CHATHAM	1:24,000	1984	PUB 49
CHURCHVILLE	1:24,000	1967	RI 12
CITY FARM	1:62,500	1958	BUL 74
COLLIERSTOWN	1:62,500	1965	RI 8
CORNWALL	1:62,500	1960	RI 1
CRAIGSVILLE	1:24,000	1970	RI 21
DALEVILLE	1:24,000	1976	RI 42
DANVILLE	1:24,000	1977	PUB 2
DEERFIELD	1:24,000	1970	RI 21
EAGLE ROCK	1:24,000	1970	RI 24
ELLIOTT KNOB	1:24,000	1970	RI 21
GLADEHILL	1:24,000	1989	PUB 90
GLASGOW	1:24,000	2000	PUB 154
GOSHEN	1:62,500	1960	RI 1
GREEN VALLEY	1:62,500	1962	RI 2
GREENVILLE	1:24,000	1967	RI 12
KELLY	1:62,500	1958	BUL 74
LEXINGTON	1:62,500	1960	RI 1
LINDSIDE	1:24,000	2001	PUB 160
LONGDALE FURNACE	1:62,500	1965	RI 8
LYNCHBURG	1:62,500	1958	BUL 74
MARTINSVILLE EAST	1:24,000	1973	RI 33
MARTINSVILLE WEST	1:24,000	1968	RI 16
MASSIES MILL	1:62,500	1966	RI 7

QUADRANGLE	SCALE	DATE	PUB
MILLBORO	1:62,500	1965	RI 8
MONTEBELLO	1:62,500	1966	RI 7
MONTVALE	1:24,000	1981	PUB 35
MOUNT HERMAN	1:24,000	1977	PUB 2
MOUNTAIN VALLEY	1:24,000	1989	PUB 90
NATURAL BRIDGE	1:24,000	1968	RI 13
NIMROD HALL	1:62,500	1965	RI 8
NORTHEAST EDEN	1:24,000	1980	PUB 22
NORTHWEST EDEN	1:24,000	1973	RI 33
ORISKANY	1:24,000	1970	RI 24
PARNASSUS	1:24,000	1969	RI 19
PENHOOK	1:24,000	1989	PUB 90
PETERSTOWN	1:24,000	2001	PUB 156
PHILPOTT RESERVOIR	1:24,000	1970	RI 22
PITTSVILLE	1:24,000	1984	PUB 49
PRICE	1:24,000	1973	RI 33
RINGGOLD	1:24,000	1977	PUB 2
ROANOKE	1:24,000	1981	PUB 34
ROCKY MOUNT	1:24,000	1989	PUB 90
RUSTBURG	1:62,500	1958	BUL 74
SALEM	1:24,000	1974	RI 37
SALISBURY	1:24,000	1970	RI 24
SANDY LEVEL	1:24,000	1988	PUB 77
SNOW CREEK	1:24,000	1973	RI 33
SPRING GARDEN	1:24,000	1982	PUB 48
STAUNTON	1:24,000	1967	RI 12
STEWARTSVILLE	1:24,000	1981	PUB 34
STOKESVILLE	1:24,000	1969	RI 19
STROM	1:24,000	1970	RI 24
STUARTS DRAFT	1:24,000	1967	RI 12
SUGARLOAF MOUNTAIN	1:24,000	1968	RI 13
VESUVIUS	1:62,500	1966	RI 7
VILLAMONT	1:24,000	1981	PUB 35
WHITMELL	1:24,000	1980	PUB 21
WILLIAMSVILLE	1:62,500	1962	RI 2

* Indicates Out of Print

INDEX TO GEOLOGIC QUADRANGLE MAPPING (1:24,000-1:62,500 SCALE) IN NORTHERN VIRGINIA

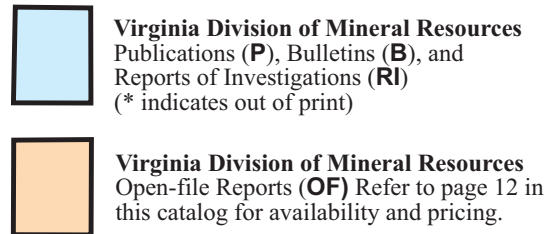


Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

INDEX TO GEOLOGIC QUADRANGLE MAPPING (1:24,000-1:62,500 SCALE)
IN NORTHERN VIRGINIA
(* Indicates Out of Print)

QUADRANGLE	SCALE	DATE	PUB
ASHBY GAP	1:24,000	1974	RI 36
BERRYVILLE	1:24,000	1973	RI 34
BLUEMONT	1:31,680	1968	RI 14
BOSWELLS TAVERN	1:24,000	1991	PUB 107
BOYCE	1:24,000	1973	RI 34
BRANDY STATION *	1:62,500	1939	BUL 54
BRIDGEWATER	1:24,000	1986	PUB 60
CONICVILLE	1:24,000	1974	RI 35
CRIMORA	1:24,000	1978	PUB 13
EDINBURG	1:24,000	1974	RI 35
FLINT HILL	1:24,000	1976	RI 44
FORT DEFIANCE	1:24,000	1978	PUB 12
FRONT ROYAL	1:24,000	1975	RI 40
GROTTOES	1:24,000	1978	PUB 10
HARRISONBURG	1:24,000	1986	PUB 60
JEFFERSONTON *	1:62,500	1939	BUL 54
KESWICK	1:24,000	1991	PUB 107
LEESBURG	1:24,000	1966	RI 11
LINCOLN	1:31,680	1968	RI 14
LINDEN	1:24,000	1976	RI 44
MADISON	1:24,000	2003	PUB 157
MASSIES CORNER	1:24,000	1980	PUB 17
MOUNT SIDNEY	1:24,000	1978	PUB 11
REMINGTON *	1:62,500	1939	BUL 54
STEPHENSON	1:24,000	1973	RI 34
STRASBURG	1:24,000	1976	RI 45
TOMS BROOK	1:24,000	1976	RI 45
WARRENTON *	1:62,500	1939	BUL 54
WAYNESBORO EAST*	1:24,000	1977	PUB 3
WAYNESBORO WEST*	1:24,000	1977	PUB 3
WOLF GAP	1:24,000	1974	RI 35
WOODSTOCK	1:24,000	1974	RI 35

* Indicates Out of Print



Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

INDEX TO GEOLOGIC QUADRANGLE MAPPING (1:24,000-1:62,500 SCALE)
IN SOUTHERN VIRGINIA
(* Indicates Out of Print)

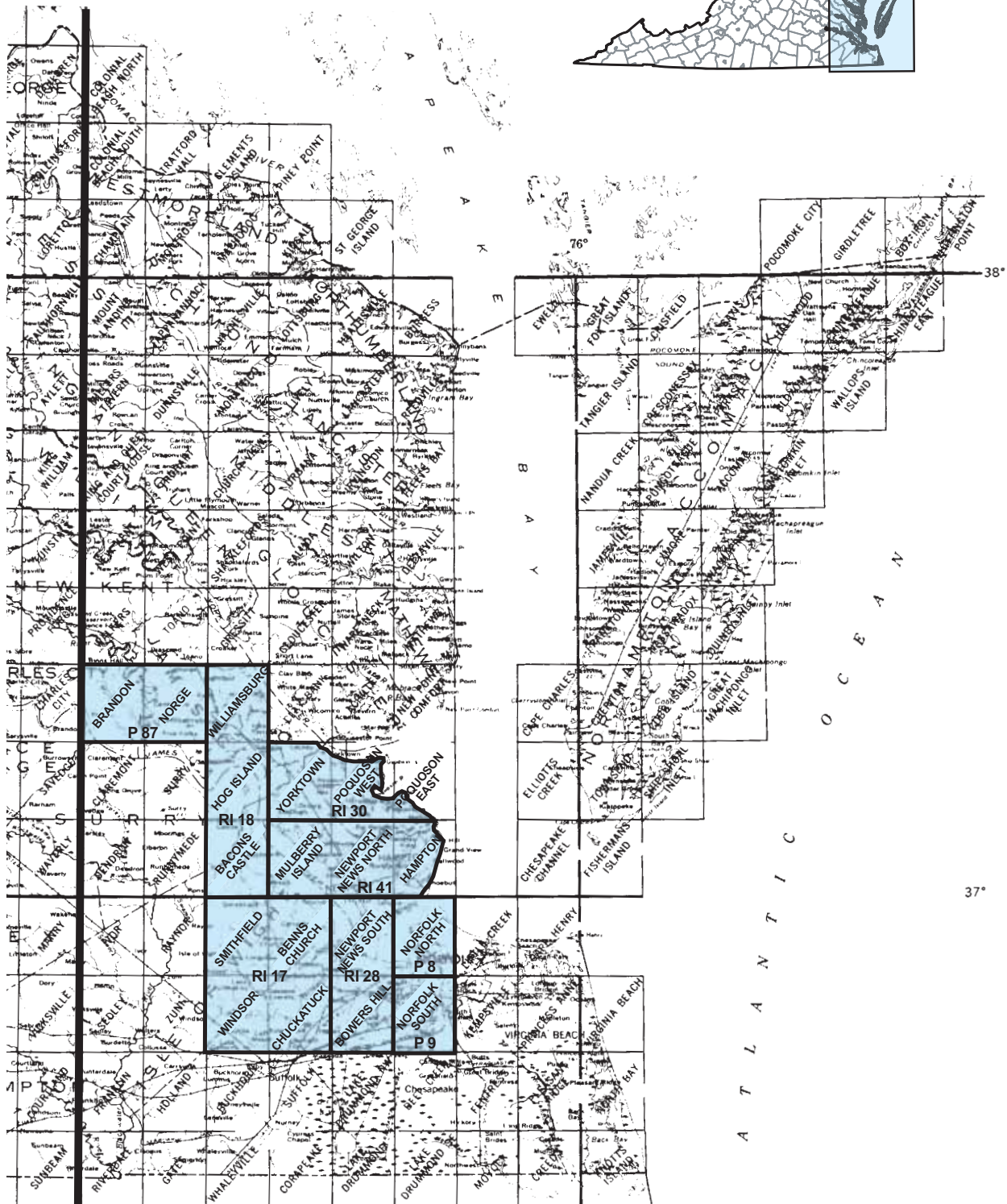
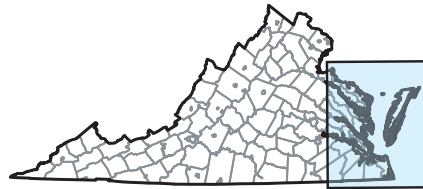
QUADRANGLE	SCALE	DATE	PUB
ANDERSONVILLE	1:24,000	1980	PUB 26
ARVONIA	1:62,500	1969	RI 10
ASHLAND	1:24,000	1986	PUB 64
BON AIR	1:24,000	1980	PUB 18
BUCKINGHAM	1:62,500	1968	RI 15
CLUSTER SPRINGS	1:24,000	1980	PUB 5
COLUMBIA	1:24,000	2005	OFR 05-02
DIANA MILLS	1:62,500	1969	RI 10
DILLWYN	1:62,500	1969	RI 10
GLEN ALLEN	1:24,000	1981	PUB 31
GLENMORE	1:62,500	1968	RI 15
GOLD HILL	1:62,500	1969	RI 10
GREENFIELD	1:24,000	1977	PUB 4
HANOVER ACADEMY	1:24,000	1981	PUB 30
HOWARDSVILLE	1:62,500	1968	RI 15
HYLAS	1:24,000	1970	RI 23
MIDLOTHIAN	1:24,000	1970	RI 23
OMEGA	1:24,000	1980	PUB 5
RICHMOND	1:24,000	1974	RI 38
SAINT JOY	1:62,500	1968	RI 15
SEVEN PINES	1:24,000	1974	RI 38
SHERANDO	1:24,000	1977	PUB 4
SIMEON	1:24,000	1994	PUB 134
SOUTH BOSTON	1:24,000	1980	PUB 5
STUDLEY	1:24,000	1974	RI 38
VIRGILINA	1:24,000	1980	PUB5
WILLIS MOUNTAIN	1:24,000	1980	PUB 25
YELLOW TAVERN	1:24,000	1974	RI 38

* Indicates Out of Print

INDEX TO GEOLOGIC QUADRANGLE MAPPING (1:24,000-1:62,500 SCALE) IN EASTERN VIRGINIA



Virginia Division of Mineral Resources
Publications (P), Bulletins (B), and
Reports of Investigations (RI)
(* indicates out of print)



Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

INDEX TO GEOLOGIC QUADRANGLE MAPPING (1:24,000-1:62,500 SCALE)
IN EASTERN VIRGINIA
(* Indicates Out of Print)

QUADRANGLE	SCALE	DATE	PUB
BACONS CASTLE	1:24,000	1969	RI 18
BENNS CHURCH	1:24,000	1968	RI 17
BOWERS HILL	1:24,000	1971	RI 28
BRANDON	1:24,000	1989	PUB 87
CHUCKATUCK	1:24,000	1968	RI 17
HAMPTON	1:24,000	1976	RI 41
HOG ISLAND	1:24,000	1969	RI 18
MULBERRY ISLAND	1:24,000	1976	RI 41
NEWPORT NEWS NORTH	1:24,000	1976	RI 41
NEWPORT NEWS SOUTH	1:24,000	1971	RI 28
NORFOLK NORTH	1:24,000	1978	PUB 8
NORFOLK SOUTH	1:24,000	1978	PUB 9
NORGE	1:24,000	1989	PUB 87
POQUOSON EAST	1:24,000	1972	RI 30
POQUOSON WEST	1:24,000	1972	RI 30
SMITHFIELD	1:24,000	1968	RI 17
WILLIAMSBURG	1:24,000	1969	RI 18
WINDSOR	1:24,000	1968	RI 17
YORKTOWN	1:24,000	1972	RI 30

* Indicates Out of Print

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

LISTING OF QUADRANGLE GEOLOGIC MAPS IN VIRGINIA

1:24,000-SCALE MAPS

QUADRANGLE	DATE	PUBLICA- TION
------------	------	------------------

ABINGDON	1980	PUB 16
ANDERSONVILLE	1980	PUB 26
APPALACHIA	1988	PUB 72
ARNOLD VALLEY	1968	RI 13
ASHBY GAP	1974	RI 36
ASHLAND	1986	PUB 64
AUGUSTA SPRINGS	1970	RI 21
AXTON	1980	PUB 22
BACONS CASTLE	1969	RI 18
BASSETT	1971	RI 26
BENHAM	1988	PUB 72
BENNS CHURCH	1968	RI 17
BERRYVILLE	1973	RI 34
BLACKSBURG	1979	PUB 14*
BLAIRS	1977	PUB 2
BON AIR	1980	PUB 18
BOWERS HILL	1971	RI 28
BOSWELL TAVERN	1991	PUB 107
BOYCE	1973	RI 34
BRADSHAW	1989	PUB 99
BRANDON	1989	PUB 87
BRIDGEWATER	1986	PUB 60
BRISTOL	1971	RI 21
BROSVILLE	1980	PUB 21
BUCHANAN	1968	RI 13
BUENA VISTA	2000	PUB 154
CALLANDS	1988	PUB 77
CANEY RIDGE	1988	PUB 84
CARBO	1991	PUB 106
CHATHAM	1984	PUB 49
CHUCKCTUCK	1968	RI 17
CHURCHVILLE	1967	RI 12
CLINCHPORT	1963	RI 5
CLINTWOOD	1988	PUB 86
CLUSTER SPRINGS	1980	PUB 5
COEBURN	1988	PUB 81
COLUMBIA	2005	OFR 05-02
CONICVILLE	1974	RI 35
CRAIGSVILLE	1970	RI 21
CRIMORA	1978	PUB 13
DALEVILLE	1976	RI 42
DAMASCUS	2005	PUB 172
DANVILLE	1977	PUB 2
DEERFIELD	1970	RI 21
DUNGANNON	1988	PUB 81
EAGLE ROCK	1970	RI 24
EAST STONE GAP	1988	PUB 79
EDINBURG	1974	RI 35
ELLIOTT KNOB	1970	RI 21
FLAT GAP	1988	PUB 71
FLINT HILL	1976	RI 44
FORT BLACKMORE	1988	PUB 80
FORT DEFIANCE	1978	PUB 12
FRONT ROYAL	1975	RI 40
GARY	1991	PUB 110
GLADEHILL	1989	PUB 90
GLASGOW	2000	PUB 154
GLEN ALLEN	1981	PUB 31
GREENFIELD	1977	PUB 4

GREENVILLE	1967	RI 12
GROTTOES	1978	PUB 10
GRUNDY	1989	PUB 97
HAMPTON	1976	RI 41
HANOVER ACADEMY	1981	PUB 30
HARMAN	1989	PUB 98
HARRISONBURG	1986	PUB 60
HAYSI	1989	PUB 91
HOG ISLAND	1969	RI 18
HOLSTON VALLEY	1980	PUB 16
HURLEY	1992	PUB121
HYLAS	1970	RI 23
JAMBOREE	1989	PUB 98
JENKINS E	1988	PUB 86
KEEN MOUNTAIN	1989	PUB 96
KESWICK	1991	PUB 107
LAUREL BLOOMERY	2005	PUB 172
LEESBURG	1966	RI 11
LINDEN	1976	RI 44
LINDSIDE	2001	PUB 160
MADISON	2003	PUB 157
MARTINSVILLE E	1973	RI 33
MARTINSVILLE W	1968	RI 16
MASSIES CORNER	1980	PUB 17
MIDLOTHIAN	1970	RI23
MONTVALE	1981	PUB 35
MOUNT HERMAN	1977	PUB 2
MOUNT SIDNEY	1978	PUB 11
MAJESTIC	1992	PUB 121
MOUNTAIN VALLEY	1989	PUB 90
MULBERRY ISLAND	1976	RI 41
NATURAL BRIDGE	1968	RI 13
NEWPORT NEWS N	1976	RI 41
NEWPORT NEWS S	1971	RI 28
NORA	1989	PUB 92
NORFOLK N	1978	PUB 8
NORFOLK S	1978	PUB 9
NORGE	1989	PUB 87
NORTHEAST EDEN	1980	PUB 22
NORTHWEST EDEN	1973	RI 33
NORTON	1986	PUB 65
OMEGA	1980	PUB 5
ORISKANY	1970	RI 24
PANTHER	1992	PUB 121
PARNASSUS	1969	RI 19
PATTERSON	1989	PUB 99
PENHOOK	1989	PUB 90
PETERSTOWN	2001	PUB 156
PHILPOTT RES	1970	RI 22
PITTSVILLE	1984	PUB 49
POQUOSON E	1972	RI 30
POQUOSON W	1972	RI 30
POUND	1988	PUB 84
PRATER	1984	PUB 52
PRICE	1973	RI 33
RICHLANDS	1991	PUB 109
RICHMOND	1974	RI 38
RINGGOLD	1977	PUB 2
ROANOKE	1981	PUB 34
ROCKY MOUNT	1989	PUB 90
SAINT PAUL	1991	PUB 106
SALEM	1974	RI 37
SALISBURY	1970	RI 24
SANDY LEVEL	1988	PUB 77

SEVEN PINES	1974	RI 38
SHADY VALLEY	1980	PUB 16
SHERANDO	1977	PUB 4
SIMEON	1994	PUB 134
SMITHFIELD	1968	RI 17
SNOW CREEK	1973	RI 33
SOUTH BOSTON	1980	PUB 5
SPRING GARDEN	1982	PUB 48
STAUNTON	1967	RI 12
STEPHENSON	1973	RI 34
STEWARTSVILLE	1981	PUB 34
STOKESVILLE	1969	RI 19
STRASBURG	1976	RI 45
STROORM	1970	RI 24
STUARTS DRAFT	1967	RI 12
STUDLEY	1974	RI 38
SUGARLOAF MTN	1968	RI 13
TAZEWELL N	1991	PUB 110
TIPTOP	1991	PUB 110
TOMS BROOK	1976	RI 45
VANSANT	1984	PUB 52
VILLAMONT	1981	PUB 35
VIRGILINA	1980	PUB 5
WALLACE	1971	RI 25
WAR	1989	PUB 99
WAYNESBORO E	1977	PUB 3*
WAYNESBORO W	1977	PUB 3*
WHARNCLIFFE	1992	PUB 121
WHITMELL	1980	PUB 21
WILLIAMSBURG	1969	RI 18
WILLIS MOUNTAIN	1980	PUB 25
WINDSOR	1968	RI 17
WISE	1988	PUB 80
WOLF GAP	1974	RI 35
WOODSTOCK	1974	RI 35
WYNDALE	1980	PUB 16
YELLOW TAVERN	1974	RI 38
YORKTOWN	1972	RI 30

1:62,500-SCALE MAPS

QUADRANGLE	DATE	PUBLICA- TION
BUCKINGHAM	1968	RI 15
BURKES GARDEN	1944	BUL 60*
DILLWYN	1969	RI 10
LEXINGTON	1960	RI 1
LYNCHBURG	1958	BUL 74
MILLBORO	1965	RI 8
VESUVIUS	1966	RI 7
WARRENTON	1939	BULL 54*
WILLIAMSVILLE	1962	RI 2

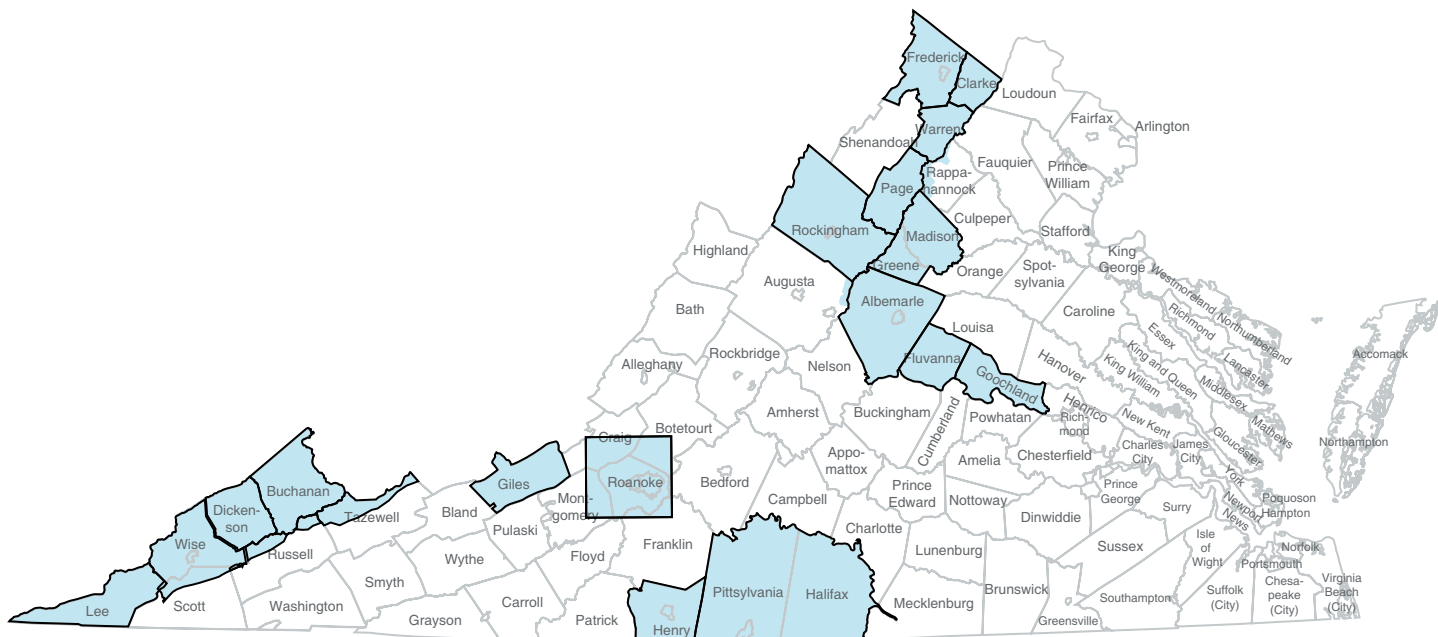
1:31,680-SCALE MAPS

AREA	DATE	PUBLICA- TION
BLUEMONT	1968	RI 14
LINCOLN	1968	RI 14

* Indicates Out of Print

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

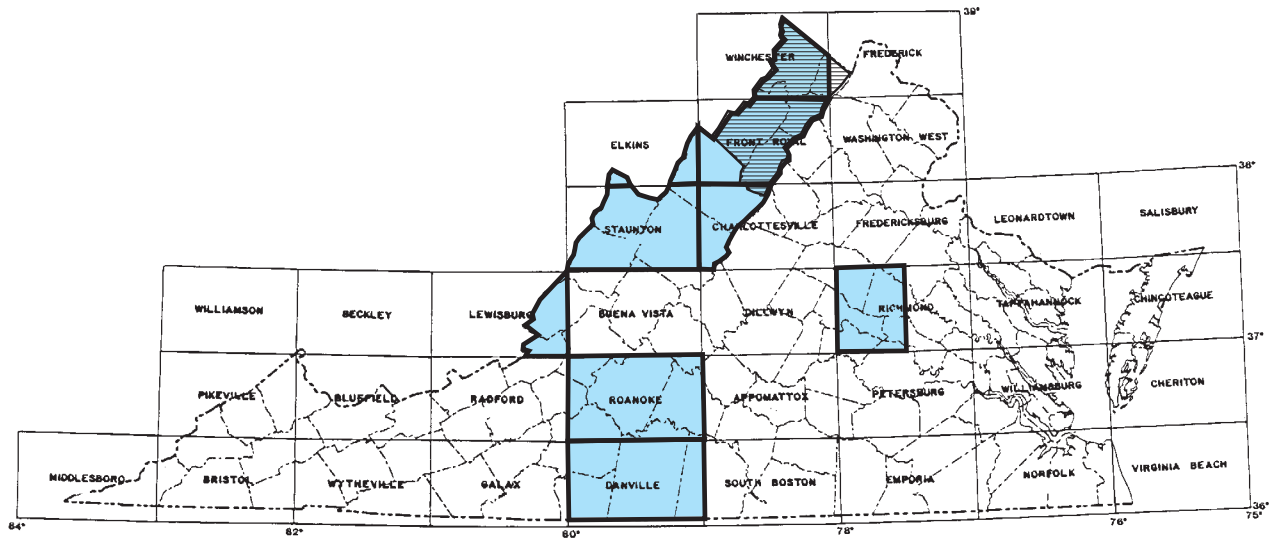
INDEX TO COUNTY-BASED GEOLOGIC MAPPING IN VIRGINIA



COUNTY/AREA	SCALE	DATE	PUBLICATION	AGENCY
ALBEMARLE	1:62,500	1962	BUL 77 *	VDMR
BUCHANAN	1:62,500	1918	BUL 18 *	VDMR
CLARKE	1:50,000	1990	PUB 102	VDMR
DICKENSON	1:62,500	1921	BUL 21	VDMR
FLUVANNA	1:62,500	1964	BUL 79	VDMR
FREDERICK	1:62,500	1966	BUL 80	VDMR
GILES	1:50,000	1986	PUB 69	VDMR
GOOCHLAND	app 1:125,000	1937	BUL 48 *	VDMR
GREENE	1:62,500	1963	BUL 78	VDMR
HALIFAX	app 1:125,000	1960	BUL 75	VDMR
HENRY	1:50,000	1996	PUB 137	VDMR
LEE	1:50,000	1992	PUB 113	VDMR
LEE	1:24000	1954	Bul 71	VDMR
MADISON	1:62,500	1963	BUL 78	VDMR
PAGE	1:62,500	1967	BUL 81	VDMR
PITTSYLVANIA	app 1:125,000	1960	BUL 75	VDMR
ROANOKE area	1:125,000	1932	BUL 34 *	VDMR
ROCKINGHAM	1:62,500	1960	BUL 76 *	VDMR
RUSSELL (portion of)	1:62,500	1922	BUL 22	VDMR
SCOTT (portion of)	1:62,500	1923	BUL 24 *	VDMR
TAZEWELL (portion of)	1:62,500	1919	BUL 19	VDMR
WARREN	1:50,000	1995	PUB 138	VDMR
WISE	1:62,500	1923	BUL 24 *	VDMR

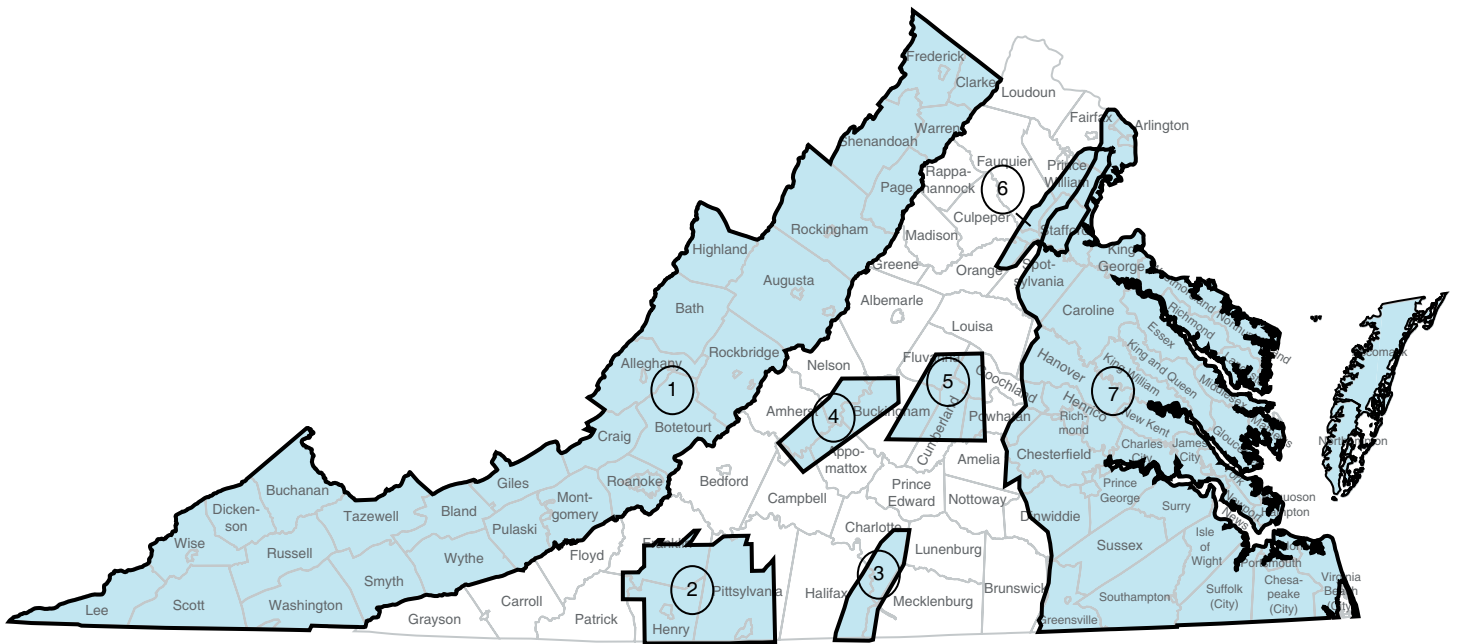
* Indicates Out of Print

INDEX TO GEOLOGIC QUADRANGLE MAPPING (1:100,000 SCALE) IN VIRGINIA



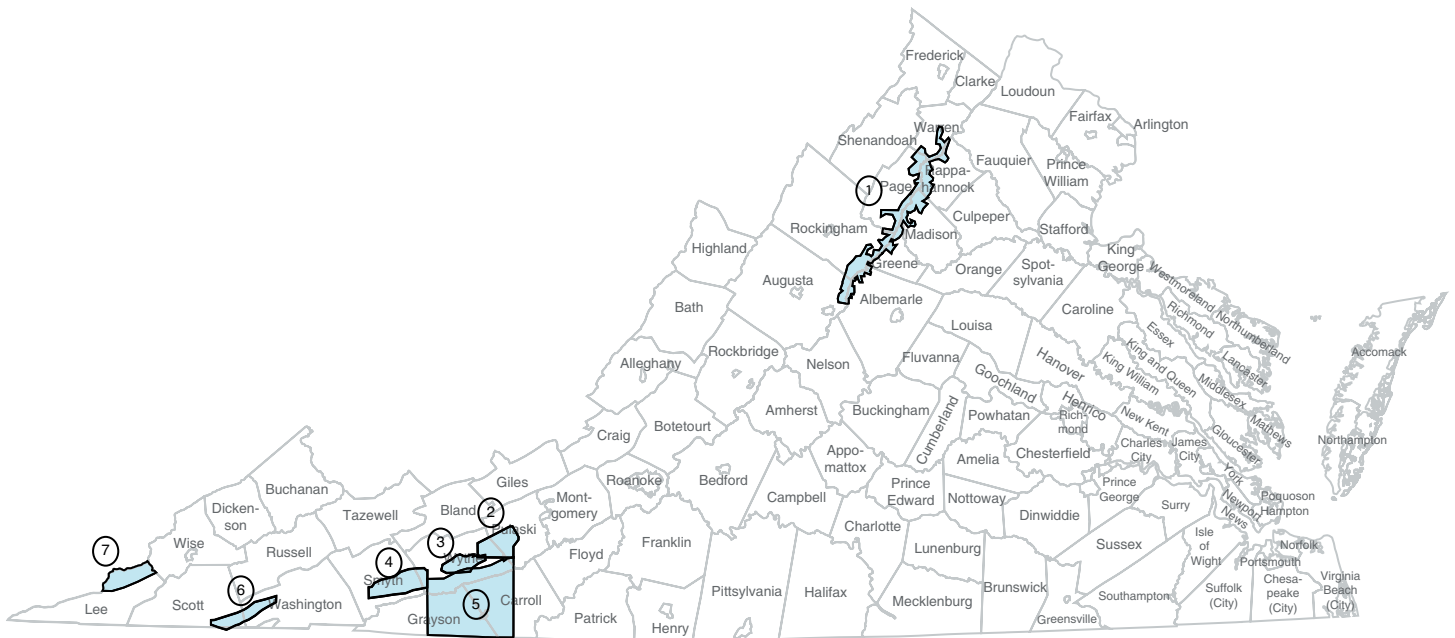
QUADRANGLE	DATE	PUBLICATION
CHARLOTTESVILLE (portion of)	2001	PUB 159
DANVILLE	2002	PUB 166
ELKINS (portion of)	2000	PUB 155
FRONT ROYAL (portion of)	2001	PUB 162
LEWISBURG (portion of)	2002	PUB 169
RICHMOND (western portion)	2002	PUB 165
ROANOKE	1997	PUB 148
STAUNTON (portion of)	2001	PUB 163
WINCHESTER (portion of)	2001	PUB 161
LORD FAIRFAX PLANNING DISTRICT (lined)	1996	PUB 143

INDEX TO REGIONAL GEOLOGIC MAPPING IN VIRGINIA



Number	Area	Scale	Date	Publication
1	APPALACHIAN VALLEY	1:250,000	1933	BUL 42
2	SW VIRGINIA PIEDMONT	1:250,000	1985	PUB 59
3	VIRGILINA DISTRICT	~1:125,000	1916	BUL 14 *
4	JAMES RIVER IRON BELT	1:125,000	1935	BUL 39 *
5	SOUTHERN GOLD-PYRITE BELT	~1:137,115	1913	BUL 7 *
6	NORTHERN GOLD-PYRITE BELT		1927	BUL 30 *
7	COASTAL PLAIN	1:250,000	1989	I-2033 (USGS Miscellaneous Investigation Series)
* Indicates Out of Print				

INDEX TO REGIONAL GEOLOGIC MAPPING IN VIRGINIA (continued)



Number	Area	Scale	Date	Publication
1	SHENANDOAH NATIONAL PARK	1:62,500	1976	BUL 86
2	DRAPER MOUNTAIN	~1:50,000	1939	BUL 55*
3	LICK MOUNTAIN DISTRICT	1:31,250	1943	BUL 59
4	GLADE MOUNTAIN DISTRICT	1:31,860	1944	BUL 61*
5	GOSSAN LEAD DISTRICT	~1:125,000	1944	BUL 72
6	EARLY GROVE GAS FIELD	1:24,000	1941	BUL 56*
7	LEE (portion of)	1:62,500	1925	BUL 26

* Indicates Out of Print

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

GENERAL INDEX

B	Bulletin
G	Guidebook
GQ	Geologic Quadrangle (USGS)
I	Miscellaneous Investigations Series (USGS)
IC	Information Circular
OFR	Open-file Report
MRC	Mineral Resources Circular
MRR	Mineral Resources Report
P	Publication
RI	Report of Investigations

Abingdon quadrangle, geology	P16
Aggregate	MRR1
Albemarle County	
geology of	B77
gravity survey	RI20
groundwater	IC2
magnetic survey	RI20
minerals of	P89
Alleghany County	
high silica resources	P67
Amonate quadrangle	GQ 1597
Analyses of carbonate rocks	
northern Virginia	P108
northwestern Virginia	P135
Anawalt quadrangle	GQ1668
Andersonville quadrangle	P26, P29
Annandale quadrangle	GQ 1601
Apatite deposits	B3-A
Appalachia quadrangle	P72, P118
Appalachian Valley	
geologic map	B42
geology of	B52
stratigraphic correlation	P37, P43
Arnold Valley quadrangle	RI13
Artesian-water resources of Coastal Plain	B51
Ashby Gap quadrangle	RI36
Ashland quadrangle	P64
Atlantic Outer Continental Shelf	P73
Augusta Springs quadrangle	RI21
Axton quadrangle	P22
Bacons Castle quadrangle	RI18
Bane dome	P117
Barite deposits	B53
Bassett quadrangle	RI26
Benham quadrangle	P72
Benns Church quadrangle	RI17
Bentonite beds	B46, P126
Berryville quadrangle	RI34
Bibliography	
coal	P39
Coastal Plain	IC9
manganese	MRC7
measured sections west of Blue Ridge	IC18
Virginia geology and mineral resources	
1941-1949	IC14
1950-1959	IC19
1960-1969	P1
1970-1979	P120

1980-1989	P123
1990-1994	P141
Big A Mountain quadrangle	B46,
Big Stone Gap quadrangle	GQ-424
Blacksburg quadrangle	P14
Blairs quadrangle	P2
Bluemont quadrangle	GQ 1739, RI14
Bon Air quadrangle	P18
Boswells Tavern quadrangle	P107
Botetourt County	
high-silica resources	P67
Bowers Hill quadrangle	RI28
Boyce quadrangle	RI34
Bradshaw quadrangle	P99
Brandon quadrangle	P87
Bridgewater quadrangle	P60
Briery Creek basin, gravity	P47
Bristol quadrangle	RI25
Brosville quadrangle	P21
Buchanan County	B18
stratigraphic cross sections	P42
Buchanan quadrangle	RI13
Buckingham quadrangle	RI15
Bucu quadrangle	B12
Burkes Garden quadrangle	B60
Callands quadrangle	P77
Camp Lee	B16
Caney Ridge quadrangle	P84
Carbo quadrangle	P106
Caves	B35, B85, P44, P83
Luray Caverns	RI3
Cement	B2-A
Central Virginia volcanic-plutonic belt	P59
Chatham quadrangle	P49
Chesapeake Bay	P56
Chloride	B58
Chuckatuck quadrangle	RI17
Churchville quadrangle	RI12
Clay deposits	
collected 1981-1984	P68
of Coastal Plain	B2, MRR8
of Piedmont	B13
of northern counties	MRR2
of west-central counties	MRR5
of southern counties	MRR12
of southwestern counties	MRR6
of Virginia	P36
uses of	MRR13
west of Blue Ridge	B20
1957-1986	P76
Clay material tests	P76
Clinchport quadrangle	RI5
Clinch Valley District, limestone and dolomite	B66
Clintwood quadrangle	B12, P86
Cluster Springs quadrangle	P5
Coal	P25, P55, P114, P126, P12, P131, P133, P149, P150
analyses	P33, P63
Appalachia and Benham quadrangles	P72
Bibliography of Virginia's	P39
Bradshaw quadrangle	P99
Coeburn and Dungannon quadrangles	P81
federal lands	P54
Flat Gap quadrangle	P71
Fort Blackmore quadrangle	P80
Keen Mountain quadrangle	P96

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

Lee County resources	P111	Culpeper basin	P24, P40, P41
Montgomery County	P124	geophysics	P24, P41
multi-seam mining	P104	radioactivity	P40
Norton quadrangle	P65	Cumberland Overthrust Block, geology of	B28, B71
Patterson quadrangle	P99	Daleville quadrangle	RI42
Pound and Caney Ridge quadrangles	P84	Danville quadrangle	P2
Prater and Vansant quadrangles	P52	Deerfield quadrangle	RI21
quality	P63	Dickenson County	
Pulaski County	P124	coal and geology	B21
stratigraphic cross sections	P42	stratigraphic cross sections	P42
War quadrangle	P99	Dillwyn quadrangle	P74, RI10
Wise quadrangle	P80	Dolomite deposits	
Coal analyses	P79, P91, P98	Clinch Valley District	B66
Coal bed methane		James River District	B73
Montgomery County	P46	New River-Roanoke River District	B62
Coal deposits		Shenandoah Valley	B65
Buchanan County	P98	Wythe and Carroll counties	B51
Dickenson County	P91, P98	Draper Mountain, geology of	B51, B55
gamma ray logs	P98	Dungannon quadrangle	P81
Scott County	P79	Eagle Rock quadrangle	RI24
Wise County	P79	Early Grove gas field	B27, B56
Coal mine roof falls	P55, P98	East Stone Gap quadrangle	P79
Coal mine safety	P55	Eastern Shore Peninsula	
Coal Resources		geology and ground water	MRC2
analyses, 1975-1977	P33	records of selected wells	MRC3
analyses, 1978-1980	P63	subsurface correlations	MRC6
Appalachia quadrangle	P118	Edinburg quadrangle	RI35
Bibliography of	P39	Elliot Knob quadrangle	RI21
Buchanan County	B18	Emery	P49
Bucu quadrangle	B12	Energy	P100, P132
Clintwood quadrangle	B12	Eocene	B57
coal analyses, Grundy quadrangle	P97	Farmville basin, gravity	P47
Coke		Federal land, coal	P54
Wise quadrangle	P80	Feldspar deposits	MRR3, B33
Dickenson County	B21	Fensters in Cumberland Overthrust Block	B28
federal lands	P54	Fieldtrip, catalogue	P130
Lee County	B26	Flat Gap quadrangle	P71
methane	P46	Flint Hill quadrangle	RI44
Pound quadrangle	B9	Fluvanna County	
Richmond coalfield	P85	geology of	B79
Russell County	B22	geophysics	RI20
Scott County	B24	Foraminiferal fauna	B67, RI9
Southwestern Virginia	B84	Fort Blackmore quadrangle	P80
Tazewell County	B19	Fort Defiance quadrangle	P12
Valley coal fields	B25	Fossils	
Wise County	B24	Appalachian Valley	B52
Coastal Plain, geology	I-2033	collecting	IC7
artesian-water resources	B51	of southeastern Virginia	RI9
clay deposits	B2, MRR8	Yorktown and Chowan River Formations	P127
geologic literature, 1783-1962	IC9	Frederick County	
geologic studies	B83	geology of	B80
geology and groundwater	B4, B63	Front Royal quadrangle	RI40
groundwater	B58, B63, B68	Gary quadrangle	P110
guidebook	IC6	Gas	
magnetic survey	RI4	Bradshaw quadrangle	P99
sand and gravel resources	B32	Buchanan County	P50, P98
Coeburn quadrangle	P81	chart	P43
Conicville quadrangle	RI35	Dickenson County	P91, P98
Continental shelf	P103	Fort Blackmore quadrangle	P80
Copper		gamma ray logs	P98
resources in Virginia	P93	Patterson quadrangle	P99
Craig County		of Early Grove, Scott and Washington Counties	B27, B56
high-silica resources	P67	of Virginia	B46, P23
Craigsville quadrangle	RI21	War quadrangle	P99
Crimora quadrangle	P13	wells	P91, P98

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

wells, prior to 1962 -----	MRR4, IC1, IC5	Off-shore Virginia -----	P94
Wise quadrangle -----	P80	Richmond basin -----	P53
Gas and oil		Scottsville basin -----	P58
Scott County -----	P79	Southwestern Virginia -----	P6
Wise County -----	P79	Taylorsville basin -----	P53
wells -----	P79	Triassic -----	P47, P94
Gas resources -----	P97, P150	Warren County -----	P7
Geophysical investigations		Willis Mountain quadrangle -----	P29
Blue Ridge anticlinorium -----	P7	Greene County -----	B78, P68, P93
Gravity surveys		Greenfield quadrangle -----	P4
Albemarle County -----	RI20	Greenville quadrangle -----	RI12
Andersonville quadrangle -----	P29	Grottoes quadrangle -----	P10
Culpeper basin -----	P24	Ground water resources	
Fluvanna County -----	RI20	Accomack County -----	MRR9
Northeastern Virginia and Eastern Shore Peninsula -----	RI32	Coastal Plain -----	B58, B63, B68
Southeastern Virginia -----	RI39	hydrography -----	B3
Southwestern Virginia -----	P6	Northampton County -----	MRR9
Virginia base net -----	IC17	Northern Virginia -----	B41, B50
Willis Mountain quadrangle -----	P29	Roanoke-Salem District -----	B69
36°30' to 39°30'N, 78°00' to 70°00'W -----	RI27	Shenandoah National Park -----	MRR10
36°30' to 38°52'30"N, 79°00' to 80°00'W -----	RI29	Shenandoah Valley -----	B45
36°30' to 38°00'N, 80°00' to 81°00'W -----	RI43	water-well data of Albemarle County -----	IC2
Magnetic surveys		Grundy quadrangle -----	P97
Albemarle County -----	RI20	Gypsum deposits	
Andersonville quadrangle -----	P21	of southwestern Virginia -----	B8
Coastal Plain -----	RI4	Hampton quadrangle -----	RI41
Culpeper basin -----	P41	Hanover Academy quadrangle -----	P30
Fluvanna County -----	RI20	Harman quadrangle -----	P98
Southwest Piedmont -----	IC12	Harrisonburg quadrangle -----	P60
Willis Mountain quadrangle -----	P21	Haysi quadrangle -----	P91
Radiometric data		Heavy-mineral studies -----	P103
Culpeper basin -----	P40	High-purity dolostone	
Southwest Piedmont -----	IC12	Clarke County -----	P108
Warren County -----	P7	Frederick County -----	P108
Giles County		Loudoun County -----	P108
geology -----	P69	Shenandoah County -----	P108
karst -----	P70	Warren County -----	P108
slope -----	P70	High-purity limestone	
Glade Hill quadrangle -----	P90	Clarke County -----	P108
Glade Mountain District, geology and manganese -----	B61	Frederick County -----	P108
Glass sand deposits -----	B34, B39, B80, MRR11	Shenandoah County -----	P108
Glen Allen quadrangle -----	P31	Warren County -----	P108
Gold -----	B 7, B 30, B 44, MRR 7, P 19, P 45, P 147	High silica resources -----	P32, P67
Goochland County, geology of -----	B48, P93	Highway construction aggregate -----	MRR1
geochemistry -----	P115	Hog Island quadrangle -----	RI18
minerals of -----	P115	Holston Valley quadrangle -----	P16
Gossan Lead District -----	P9	Hylas quadrangle -----	RI23
geology and mineral resources -----	B72	Igneous rocks -----	IC16, B64
Granite deposits		Iron deposits	
of Virginia -----	B64	in Virginia -----	MRC1
Petersburg -----	B51	James River Basin -----	B39
Gravel resources		Oriskany -----	B46
in Virginia -----	P7	Iron ore -----	P35
of Coastal Plain -----	B32	James River Basin	
Gravity		gold belt -----	B7
Andersonville quadrangle -----	P29	iron belt -----	B39
Bane dome -----	P117	marble belt -----	B39
Blue Ridge anticlinorium -----	P87	physiography -----	B11
Buckingham County -----	P29	James River District limestone and dolomite -----	B73
Culpeper basin -----	P24	Jenkins East quadrangle -----	P86
Danville basin -----	P58	Jewell Ridge quadrangle -----	GQ 1550
Eastern Virginia -----	P94	Karst -----	P44, P70, P75, P83, P101, P102
Farmville basin -----	P47	Giles County -----	P70
Gravity map of Virginia		Warren County -----	P15
Mesozoic basins -----	P94, P24, P47	Keswick quadrangle -----	P107

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

Kyanite deposits -----	B38, P25, P29	gravity -----	P58
Landslides -----		Eastern Virginia -----	
Giles County -----	P69	gravity -----	P94
Landslides and rockfalls -----		magnetics -----	P94
Warren County -----	P15	Farmville basin -----	
Land use -----		gravity -----	P47
Warren County -----	P15	Off-shore Virginia -----	
Lead resources in Virginia -----	P93	gravity -----	P94
Lead deposits -----		magnetics -----	P94
of southwestern Virginia -----	B43	Richmond basin -----	
of Staunton quadrangle -----	RI31	gravity -----	P53
of Virginia -----	B1, P93	Scottsville basin -----	
Lee County -----	P95	gravity -----	P58
geology of Powell Valley -----	B51	Taylorsville basin -----	
oil and geology of -----	B71	gravity -----	P53
Leesburg quadrangle -----	RI11	Metal deposits -----	
Lexington quadrangle -----	RI1	base and precious -----	MRR7
Lick Mountain District manganese deposits -----	B59	of the Virgilina District -----	B14
Limestone -----	P108	Methane -----	P46
Limestone deposits -----		Mica deposits -----	MRR3, B33
Clinch Valley District -----	B66	Midlothian quadrangle -----	RI23
Everona -----	IC10	Millboro quadrangle -----	RI8
James River District -----	B73	Milton quadrangle -----	I-683
New River-Roanoke River District -----	B62	Mine roof failure -----	P55
Shenandoah Valley -----	B65	Miner training -----	P55
Wythe and Carroll Counties -----	B51	Minerals, Identification of common -----	IC3, P89
Lincoln quadrangle -----	RI14	Virginia -----	P62
Linden quadrangle -----	RI44	Mineral Production of Resources -----	
Little North Mountain -----	B51	1908 -----	B1-A
Luray Caverns -----	RI3	1909-1910 -----	B6
Lynchburg quadrangle -----	B74	1911-1912 -----	B8
Madison County, geology of -----	B78, P93	and Confederacy -----	B46
Madison quadrangle -----	P157	Industry -----	IC8, IC11, IC13, P82
Magnetics -----		Producers -----	IC4, P129
aeromagnetic map of Virginia -----	GP 915	Virginia -----	B47, P7, P51
aeromagnetic map of Virginia, in color -----	GP 916	Mineral Resource Data System (MRDS VA) -----	P51
Andersonville quadrangle -----	P29	Montvale quadrangle -----	P35
Blue Ridge anticlinorium -----	P7	Mountain Lake -----	B46
Buckingham County -----	P29	Mountain Valley quadrangle -----	P90, Part B
Off-shore Virginia -----	P94	Mount Hermon quadrangle -----	P2
Mesozoic basin -----	P94, P41	Mount Sidney quadrangle -----	P11
Warren County -----	P7	Mulberry Island quadrangle -----	RI41
Willis Mountain quadrangle -----	P29	Names, geographic and cultural -----	IC20
Manganese deposits -----		Natural Bridge -----	B46
of Blue Ridge -----	B17	Natural Bridge quadrangle -----	RI13
of Glade Mountain District -----	B61	Newport News North quadrangle -----	RI41
of Lick Mountain District -----	B59	Newport News South quadrangle -----	RI28
of Virginia -----	MRC7	Niobium (niobian) -----	P115
of Western Virginia -----	B23	Nora quadrangle -----	P92
Oriskany Sandstone -----	B46	Norfolk North quadrangle -----	P8
Marble deposits -----		Norfolk South quadrangle -----	P9
Everona Formation -----	IC10	Norge quadrangle -----	P87
of Giles County -----	B40	Northeast Eden quadrangle -----	P22
of James River Basin -----	B39	Norton quadrangle -----	P65
Marion area -----	B46	Oak Grove core -----	P20
Marl P75, P101 -----		Off-shore Virginia -----	
Martinsville East quadrangle -----	RI33	gravity -----	P94
Martinsville West quadrangle -----	RI16	magnetics -----	P94
Massies Corner quadrangle -----	P17	mesozoic basins -----	P94
Mesozoic basins -----		Oil -----	
Culpeper basin -----		at Early Grove, Scott, and Washington Counties -----	B27, B56
gravity -----	P94, P24	chart -----	P43
magnetics -----	P94, P41	Cumberland Overthrust Block -----	B71
radioactivity -----	P40	Lee County -----	B71, P28, P113
Danville basin -----		of Virginia -----	B46, P23

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

Rose Hill District	B71	Scottsburg basin gravity	P47
wells, prior to 1962	MRR4, IC1, IC5	Seismic profile	I-64 P66, P140
Omega quadrangle	P5	Seven Pines quadrangle	RI38
Oriskany quadrangle	B46, RI24	Shady Valley quadrangle	P16
Page County, geology of	B81	Shale deposits	
Parnassus quadrangle	RI19	of northern counties	MRR2
Patterson quadrangle	P99	of southern counties	MRR12
Pegmatite deposits	B33, MRR3	of southwestern counties	MRR6
Penhook quadrangle	P90, Part B	of west-central counties	MRR5
Petroleum offshore	P73	west of Blue Ridge	B20
Philpott Reservoir quadrangle	RI22	Shenandoah National Park	
Pittsville quadrangle	P49	geology	B86
Poquoson East quadrangle	RI30	groundwater	MRR10
Poquoson West quadrangle	RI30	Shenandoah Valley	
Pound quadrangle	B9, P84	groundwater	B45
Powell Valley geology	B51	limestone and dolomite	B65
Prater quadrangle	P52	sulfide mineralization	B70
Price quadrangle	RI33	Sherando quadrangle	P4
Purcellville quadrangle	GQ 1755	Silica deposits	
Pyrite deposits of Piedmont Province	B30	Alleghany County	P67
Quantic quadrangle	GQ-1044	Augusta County	P32
Quartzarenite		Bath County	P32
High silica glass sand	P79, P91	Botetourt County	P67
Non-polishing aggregate	P79, P91	Clarke County	MRR11
Quartzite deposits of the Lick Mountain District	B59	Craig County	P67
Radioactivity		Frederick County	MRR11
Andersonville quadrangle	P29	Highland County	P32
Blue Ridge anticlinorium	P7	Page County	MRR11
Buckingham County	P29	Roanoke County	P67
Culpeper basin	P40	Rockbridge County	P32
Powhatan County	P78	Rockingham County	MRR11
Willis Mountain quadrangle	P29	Shenandoah County	MRR11
Radioactive minerals	P48	Warren County	MRR11
Randolph basin gravity	P47	Sinkholes	P44, P70, P83, P102
Richlands quadrangle	P109	Slate deposits	
Richmond Coal Field	P85	Albemarle County	B77
Richmond basin		Fluvanna County	B79
gravity	P47	varved, of Fauquier County	B51
mining history	P85	Smithfield quadrangle	RI17
Richmond quadrangle	RI38	Snow Creek quadrangle	RI33
Ringgold quadrangle	P2	Soapstone deposits of Albemarle County	B77
Roanoke Creek basin, gravity	P47	South Boston quadrangle	P5
Roanoke-Salem District, groundwater	B69	Spray quadrangle	RI33
Roanoke quadrangle	B34, P34, P148	Spring Garden quadrangle	P48
Rockbridge County		Springs	
minerals of	P115	Clarke County	P102
Rockfall hazard	P35	ebb and flow	B46
Rockingham County		thermal	B36
geology of	B76	St Paul quadrangle	P106
Rocky Mount quadrangle	P90	Staunton quadrangle	RI12
Rocks, identification of common	IC3	zinc, lead, and copper of	RI13
Rogers, William Barton	B46	Stephenson quadrangle	RI34
Rose Hill District oil and geology of	B71	Stewartsville quadrangle	P34
Russell County, geology of	B49	Stokesville quadrangle	RI19
Salem quadrangle	RI37	Strasburg quadrangle	RI45
Salisbury quadrangle	RI24	Strom quadrangle	RI24
Salt Deposits of Southwestern Virginia	B8	Stuarts Draft quadrangle	RI12
Sand Resources		Studley quadrangle	RI38
of Coastal Plain	B32	Sugar Loaf Mountain quadrangle	RI13
of Virginia	P7	Sulfide Mineralization	
Sandstone	P79	Albemarle County	B77
high-silica resources	P67	Gossan Lead District	B72
Sandy Level quadrangle	P77	Greene County	B78
Scott County	B24	James River Basin	B39

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

Madison County -----	B78
northeastern Piedmont -----	B30
Shenandoah Valley -----	B70
Surface Water Supply -----	B10, B31
hydrography -----	B3
Taylorsville basin, gravity -----	P47
Tazewell County	
coal and geology -----	B19
Tazewell North quadrangle -----	P110
Tin deposits near Irish Creek -----	B15-A, P7, P112
Tip Top quadrangle -----	P110
Tom Brook quadrangle -----	RI45
Travertine-marl -----	P75, P101
Clarke County -----	P102, P108
Frederick County -----	P108
Warren County -----	P108
Triassic basins	
gravity -----	P47, P53, P58
offshore -----	P94
Danville Basin -----	RI6
Virginia -----	B29
Uranium deposits -----	P48
Albemarle County -----	P38
Central Virginia -----	P38
Lovingston Formation -----	P38
Powhatan County -----	P78
Valley and Ridge	
correlation -----	P37, P43
oil and gas -----	P43
stratigraphy -----	B52, P37, P43
Valley coalfields -----	B25, P124
Vansant quadrangle -----	P52
Vermiculite -----	P82, P95
Vesuvius quadrangle -----	RI7
Vienna quadrangle -----	GQ 1670
Villamont quadrangle -----	P35
Virgilina district	
Carolina slate belt -----	P93
ore deposits and geology -----	B14
Virgilina quadrangle -----	B14, P5
Wallace quadrangle -----	RI25
War quadrangle -----	P99
Warrenton quadrangle -----	B54
Waynesboro East quadrangle -----	P3
Waynesboro West quadrangle -----	P3
Whitmell quadrangle -----	P21
Williamsburg quadrangle -----	RI18
Williamsville quadrangle -----	RI2
Willis Mountain quadrangle -----	P25, P27, P29, P74
geophysics -----	P29
radioactivity -----	P29
Windsor quadrangle -----	RI17
Wise quadrangle -----	P80
Wise quadrangle -----	P80
Wolf Gap quadrangle -----	RI35
Woodstock quadrangle -----	RI35
Wyndale quadrangle -----	P16
Yellow Tavern quadrangle -----	RI38
York-James Peninsula -----	B37
Yorktown quadrangle -----	RI30
Zinc deposits	
of southwestern Virginia -----	B43
of Staunton quadrangle -----	RI31
of Virginia -----	B1, P93

INDEX TO VIRGINIA MINERALS ARTICLES

Subject	Vol.	No.	Year
Accomack County, gravity	16	3	1970
Albemarle County			
chemical analyses of rocks	10	1	1964
cuprite	10	2	1964
soapstone study in	3	4	1957
Amherst County			
Hurricane Camille	Special Issue		1969
soapstone study in	3	4	1957
Andalusite	32	4	1986
Augusta County, Hurricane Camille	16	1	1970
Balcony Falls	37	4	1991
Battlefield granite	32	3	1986
Barger's quarry	33	2	1987
Biostratigraphy	34	2	1988
Blue quartz	27	2	1981
Blue Ridge anticlinorium,			
road log near Martinsville	19	4	1973
Briery Creek basin	33	3	1987
Brocks Gap, geology of	22	4	1976
Buchanan County			
Beatrice Pocahontas mine	11	1	1965
Buckingham County			
upland fluvial terrace	30	4	1984
kyanite	13	1	1967
Caledonia quadrangle			
geochemical reconnaissance for gold	23	2	1977
Caroline Stone Quarry	33	4	1987
Cassiterite	32	2	1986
Caves and caverns			
commercial caverns in Virginia	29	1	1983
spelunking in Virginia	2	4	1956
Tolley's Cave	10	1	1964
Carroll County			
Melanterite-rozenite-pyrrhotite	17	1	1971
Carters Bridge, Earthquake, Feb 27, 1977	23	3	1977
Catoctin Formation			
trace elements in stream sediments	23	4	1977
Charcoal iron industry	37	4	1991
Chemical analyses,			
Albemarle and Fluvanna counties	10	1	1964
Chesapeake Bay bridge tunnel	7	4	1961
Chrysoberyl	45	1	1999
Churchville quadrangle road log	15	3	1969
Civil War, mineral resources and geology	43	4	1997
	44	2	1998
Clay products industry, structural	8	2	1962
Cold Springs	44	1	1998
Coal			
Beatrice, Pocahontas mine, Buchanan			
County	11	1	1965
highlights in the Virginia coal industry	7	3	1961

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

Pocahontas No 3, southwest Virginia	18	1	1972	selected Tertiary fossil localities,			
Coal resources				Coastal Plain	8	3	1962
research	29	1	1983	unique fossils from Virginia	6	3	1960
summary of Virginia	25	1	1979	Frederick County			
in water	32	3	1986	road log	17	2	1971
Wise quadrangle	37	3	1991	fuels	25	4	1979
Coastal Plain				Gamma-ray spectrometry	25	3	1980
artesian water levels south of the James				Gem stones	17	1	1971
River, predicted lowering of	12	4	1966	Geochemistry reconnaissance for gold,			
diatomaceous sediments	11	3	1965	Caledonia and Pendleton quadrangles	23	2	1977
fluoride in water wells	8	1	1962	Geographic center of Virginia located	8	3	1962
oil and gas exploration	7	3	1961	Geological displays	29	3	1983
Piney Point Formation, Pamunkey River	31	2	1985	Geologic mapping	9	2	1963
Pleistocene Pelecypoda	8	3	1962	Summary	45	2	1999
selected Tertiary fossil localities	8	3	1962	and gamma ray spectrometry	25	3	1979
Coking industry in Virginia	15	1	1969	Geologic maps—their preparation and use	19	3	1973
Columbia granite, age of biotite from	7	4	1961	Geologic research in Virginia	26	2	1980
Copper				Geologist's in highway engineering	3	4	1957
abandoned mines and prospects, Virgilina				Geophysical surveying	2	3	1956
district	22	3	1976	Geothermal energy	28	2	1982
Copper, lead, and zinc mines in the				Gold mines and prospects in Virginia	17	3	1971
Piedmont of Virginia,	20	2	1974	Gold occurrences, an update	28	4	1982
Cumberland County road log	21	4	1975		31	4	1985
Cuprite, Albemarle County	10	2	1964		37	1	1991
Desulfurization of flue gas	33	4	1987		41	2	1995
Diamonds	42	4	1996	Gold, processes in recovery	26	3	1980
Diatomaceous sediments in Virginia	11	3	1965	Gravity			
Division of Mineral Resources				Accomack County	16	3	1970
objectives of the	3	3	1957	Northampton County	16	3	1970
reorganization	35	2	1989	Greenville quadrangle road log	15	3	1969
Earthquake				Ground water			
Carters Bridge, Feb 27, 1977	23	3	1977	level fluctuations	13	1	1967
outlook	35	3	1989		14	3	1968
Energy				management of water resources	12	2	1966
federal response	30	1	1984	predicted lowering of artesian water			
historical background on policy	30	1	1984	levelssouth of the James River	12	4	1966
position of United States, 1972	19	2	1973	Piedmont	1	3	1955
use by United States, 1972	19	2	1973		5	4	1959
Environmental geology environment and	18	3	1972	second biggest well in Piedmont			
Evaporite deposits in southwestern				completed	1	1	1955
Virginia, suggestions for prospecting	11	4	1965	Heavy metals, renewed interest in	12	3	1966
Everona Formation in northern Piedmont	10	4	1964	in gravel deposits	33	4	1987
Farmville Triassic basin	28	3	1982	Hurricane Camille	Special Issue		1969
Farmville lithia springs	29	2	1983		16	1	1970
Field Guide, SW Virginia	39	4	1993	Highway engineering, geologist's role in	3	4	1957
Fluoride in water wells, Coastal Plain	8	1	1962	Iron mineral pigments in Virginia	10	3	1964
Fluvanna County chemical analyses of				Iron-oxide	10	3	1964
rocks	10	1	1964	Iron sulfide mines in Virginia	19	3	1973
Fossils				Kyanite	13	1	1967
collecting localities	20	1	1974	Kyanite-mullite industry	13	1	1967
Miocene and Pleistocene forminifera				K-bentonite	43	1	1997
and Ostracoda of southwestern				Landforms	34	3	1988
Virginia	12	3	1966	Landslide (Chimbarazo Hill)	48	4	2005
Pleistocene Gastropoda of Virginia	13	2	1967	Lead			
Pleistocene mollusks of Virginia	18	2	1972	abandoned mines	20	2	1974
Pleistocene Pelecypoda of Virginia	12	3	1966	Wythe County, civil war	42	2	1996

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

Liberty Hall Formation	26	4	1980	Nuclear controversy view from Britain	21	2	1975
Lightweight-aggregate industry in Virginia	9	3	1963	Oil and gas			
Lime industry in Virginia	4	2	1958	Accomack County, deep exploratory			
	32	4	1986	test	17	4	1971
Madison County road log	21	4	1975		18	1	1972
Mannoth	45	1	1999	catalog of samples	42	1	1996
Manganese operations in Virginia,				deep well, Bergton, Rockingham County	12	1	1966
current	1	5	1955	development in Virginia			
Maps				1964	11	2	1965
mineral resources of Virginia (1971)	17	3	1971	1965	12	2	1966
Martinsburg Formation in west-central				1966	13	2	1967
Virginia	11	3	1965	1967	14	2	1968
Melanterite	17	1	1971	1968	15	2	1969
Meteorites, Virginia	20	3	1974	1969	16	2	1970
Metals, heavy, renewed interest in	12	3	1966	1970	17	2	1971
Minerals (and fuels)	25	4	1979	1971	18	2	1972
Rockbridge County	40	1/2	1994	1972	19	3	1973
Mineral collecting in Virginia	3	2	1957	1973	20	4	1974
industries	29	3	1983	1974	21	3	1975
Mineral-collecting localities	20	1	1974	1976	23	4	1977
	33	1	1987	1977	24	3	1978
Mineral and fossil collecting sites	31	3	1985	exploration	7	2	1961
Mineral dependency	26	4	1980	exploration, eastern Virginia	7	3	1961
Mineral heritage—over-indulgence or				exploration, overthrust belts	27	4	1981
self-denial	17	4	1971	in Virginia, 1959	5	2	1959
Mineral pigments in Virginia, iron and				in Virginia, 1954	1	3	1955
titanium	10	3	1964	in Virginia, 1980	27	1	1981
Mineral production in Virginia, coal, gas				production, 1963	10	2	1964
and oil	30	3	1984	resources	1	2	1955
Mineral resources, a summary of Virginia's	1	1	1955	test holes	15	3	1969
Mineral resources development	16	2	1970	well drilling, summary first half 1961	7	4	1961
in comprehensive planning	45	2	1999	well report—Scott County	10	2	1964
Mineral resources replenishing				Pendleton quadrangle			
nonrenewable	24	2	1978	geochemical reconnaissance for gold	23	2	1977
Mineral resources, 1981	28	1	1982	Penthandite	32	3	1986
Mineralogy and chemistry of gold,				Petrochemical plants in Virginia	6	4	1960
Halifax County	31	2	1985	Piedmont			
Minerals management plan	29	4	1983	abandoned copper, lead, and zinc mines	20	2	1974
Mining, 1995	43	3	1997	gold	23	2	1977
By-product resources	44	2	1998	road log, Martinsville area	19	4	1973
Molybdenite	32	3	1986	second biggest water well in Piedmont			
Morefield mine	32	2	1986	completed	1	1	1955
Mountains, highest	33	2	1987	Pigments	10	3	1964
Mullite	13	1	1967	Plum agate	34	1	1988
Mullite industry	13	1	1967	Potassium	37	2	1991
Narrows landslide	29	4	1983	Prince Edward County, kyanite	13	1	1967
Natural Bridge	10	2	1964	Propane, underground storage of liquid	7	3	1961
Nelson County				Pulaski County, Civil War	43	4	1997
Horseshoe Mountain quadrangle uranium				Pyrite	33	2	1987
and thorium mineralization	30	4	1984	Quartz crystals	29	1	1983
Hurricane Camille	Special Issue		1969	Radiation	25	2	1979
soapstone study in	3	4	1957		37	2	1991
Northeastern Virginia road log to				Radioactivity	37	2	1991
abandoned gold mines	21	1	1975	surveys	25	2	1979
Northampton County				gamma ray and geologic mapping	25	3	1979
gravity	16	3	1970				

Virginia Department of Mines, Minerals and Energy
Division of Mineral Resources

Radon	34	1	1988	Titanium	10	3	1964
Reclamation of depleted sand and gravel sites, eastern Virginia	13	3	1967	Titanium mineral pigments in Virginia	10	3	1964
Riebaeckite occurrence in Virginia	13	1	1967	Titanium plant, new (1958)	4	1	1958
Road Logs				Tolley's Cave	10	1	1964
abandoned gold mines, northeastern Virginia	21	1	1975	Topaz crystal	29	1	1983
Abingdon and Shady Valley quadrangles	26	1	1980	Topographic maps	9	1	1963
Appalachian Valley				in Virginia	5	3	1959
northern Virginia	22	2	1976	new maps	6	4	1960
Frederick County	17	2	1971	progress	10	3	1964
List for Virginia geology	22	1	1976	recommendation for	8	1	1962
Madison and Cumberland counties, Piedmont	21	4	1975	coordinate systems	45	1	1999
Martinsville area	19	4	1973	uses	14	1	1968
Sauratown Mountains anticlinorium	19	4	1973	vacation helpers	19	2	1973
Staunton, Churchville, Greenville, and Stuarts Draft quadrangles	15	3	1969	Trace elements			
Valley and Ridge Province	27	3	1981	stream sediments, derived from Catoctin			Formation,
Rock and mineral resources	28	1	1982	northern Virginia	23	4	1977
Rockbridge County				Travertine-Marl deposits	31	1	1985
Hurricane Camille	16	1	1970	Trolleite	32	1	1986
Minerals	40	1/2	1994	Underground storage of liquid propane	7	3	1961
Rockingham County				Uranium	1	2	1955
geology of Brocks Gap	22	4	1976		37	2	1991
Salt, suggestions for prospecting for in south-western Virginia	11	4	1965	in Virginia	1	4	1955
Smyth County, Civil War	42	3	1996	producing areas	1	4	1955
Sauratown Mountains				Valley and Ridge Province	27	3	1981
anticlinorium, road log near Martinsburg	19	4	1973	Vermiculite	3	1	1957
Shell production, large scale in Virginia	11	4	1965	Virgilina district			
Scott County, well report	10	2	1964	abandoned copper mines and prospects	22	3	1976
Seismic hazard in Virginia	24	4	1978	mineralogy and chemistry of gold	31	2	1985
Shenandoah Valley				Walker Mountain Sandstone	39	4	1993
Lower to Middle Silurian sandstones	24	1	1978	Warm springs deposiots	43	2	1997
Silica resources	32	1	1986	Washington County	26	1	1980
Silurian				Well-logging methods, mechanical	16	4	1970
sandstones in central Shenandoah Valley, Virginia	24	1	1978	Zinc			
Silver in Virginia	22	1	1976	abandoned mines, Piedmont of Virginia	20	2	1974
Sinkhole Assessment	37	3	1991				
Slate	34	4	1988				
Soapstone study in Albemarle, Nelson, and Amherst counties	3	4	1957				
Soapstone, talc, and related deposits	7	2	1961				
Spectrometry and geologic mapping	25	3	1979				
Spelunking in Virginia	2	4	1956				
Strengite	37	4	1991				
Strontium minerals, Wise County	6	4	1960				
update	29	2	1983				
Structural clay products industry	8	2	1962				
Sulfides in Virginia	2	1	1956				
Talc, soapstone and related deposits	7	2	1961				
Thorium	37	2	1991				
Titaniferous minerals	43	1	1997				

PUBLICATION ORDER FORM

***Tax Identification Number is required for organizations which are tax exempt or for refunds**

GENERALIZED GEOLOGIC MAP OF VIRGINIA

